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ABSTRACT

This package includes a description of Nova University's Human Resource Development (HRD) core seminar and materials from the International Cluster. The first section presents the rationale for HRD as learning to learn becomes the critical technology in an era of global competition and accelerating modernization. An overview of Nova's core HRD seminars is followed by a description of the International Cluster HRD, started for foreign students and persons living in remote areas. The format consists of two seminars prior to the summer institute; its goal is the development of high performance learners and leaders. A 24-item bibliography is followed by seven appendices: (1) seminar student instructions and assignments; (2) HRD visions and action plans; (3) preferences for scenario and action plan development; (4) vision and action plan for "Science, Technology, and Society" by Madeleine Friedman; (5) explanation of Nova's electronic library; (6) list of student practicum papers and abstracts of seven major applied research projects; and (7) a networking session, "Science and Technology: Impact on Workplaces and Workforces." (YLB)

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ED 361 531

TOWARD THE 21st CENTURY: PREPARING PROACTIVE VISIONARY TRANSFORMATIONAL LEADERS FOR BUILDING LEARNING COMMUNITIES

HUMAN RESOURCE DEVELOPMENT

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SUMMER 1993

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TOWARD THE 21st CENTURY: PREPARING PROACTIVE VISIONARY TRANSFORMATIONAL LEADERS FOR BUILDING LEARNING COMMUNITIES THROUGH HUMAN RESOURCES DEVELOPMENT

by

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Summer 1993

Abstract

The ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems -- health and human services, business and industry, government and public service, and education and training.

Nova University was founded in 1964. The Ed.D. Programs for Higher Education (PHE) were started in 1972 with a focus on preparing community college personnel. That single program evolved into five areas of specialization: Higher Education; Adult Education; Vocational, Technical, and Occupational Education (VTOE); Computing and Information Technology (1993); and Health Care Education (1994).

A curriculum change was made in 1990 which involved the (1) conversion of Personel-Human Resources Development, a VTOE specialization seminar, to the core seminar Human Resources Development beginning fall 1990; (2) addition of Leadership as a sixth core seminar beginning fall 1991; (3) addition of a VTOE Trends and Issues specialization seminar for second year students beginning 1992; (4) elimination of Learning Theory as a core seminar; and (5) reduction of the number of practicums from five to four.

Professionals who enroll as students participate in a cluster. An International Cluster was started for foreign students and persons living in remote areas. This paper describes PHE and HRD for International Cluster 1993.

Human Resources Development (HRD) as a core seminar acknowledges the centrality of learning and systematic nurturing of human resources. This paper describes a few developmental tasks in creating High Performance Learners and Leaders for Building Learning Communities.

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Where there is no vision,
the people perish.

Proverbs 29:18

LEARNING TO LEARN: THE CRITICAL COMPETENCY

* * * * * * * * * *

In 1955, it was hand set type and the platen press.
In 1981, it was the PC.
In 1985, it was desktop publishing.
In 1989, it was voice activitated technology and desktop presentations with sophisticated graphics.
In 1993, it was voice activated typewriters and electronic books.
In 1994, it will be desktop videoconferencing which minimizes geographic, physical and temporal restrictions.

* * * * * * * * * *

ABCs of 3 Rs: Rethinking for Restructuring and Revitalizing

A. Agricultural Era

During the Agricultural Era, the United States had education for the elite who attended private schools and colleges for the privileged destined for the professions. Apprenticeship training was available for people who were destined to become craftsmen. The U.S. invented the "common" elementary school and spread it, first in urban areas and then in rural areas. Then, the U.S. invented secondary education and spread it in a similar manner.

B. Business Industrial Era

The transition from an agricultural era to the business and industrial era was based on low technology and know-how and took place over a long period of time.

As the U.S. emerged during the business and industrial era, the vocational track was added to the academic track. A general track was added to accommodate students whose needs were not met in the academic and vocational tracks.

Major **expansion** occurred in the 1940s and 1950s in all sectors of the economy, particularly manufacturing and services. Rapid advances in science and technology yielded global competition and **modernization** at an accelerating rate. Establishments that survived, modernized with new technology in the 1960s and early 1970s. During the late 1970s and the early 1980s, it became apparent that modernization of industrial era establishments was necessary, but insufficient. The surviving manufacturing sector establishments modernized several times with contemporary technology and then began to **restructure**. More important, however, a few establishments began to recognize the centrality of **Human Resources Development** committed to **Total Quality** with world class **Benchmarking Standards**.

Alternative education has been available since the beginning of time. There have always been two primary forms of education: (1) direct experience and (2) that which is transmitted from one member of a species to another via communications. Alternative education made considerable advances with the invention of telecommunications, a trend that will accelerate with electronic books and libraries, voice activated devices, and videoconferencing.

An analysis of alternative education for a workshop for the Depa~tment of Education of Arkansas in 1989, yielded the following categories of alternative education: contemporary traditional education (CTE), partial technological deschooling (PTD), collaborative lifelong learning (CLL), and outcomes based education (OBE) or solution based learning (SBL). In 1984, the New York Institute of Technology announced it was possible to complete a four-year degree program via personnel computer and modem. Technology intensive delivery systems were described in Any Home A Classroom (Halperin, 1984) and The Education Utility (Gooler, 1986). Nontraditional education today will be traditional education tomorrow.

Although the manufacturing sector of the economy began to fundamentally restructure in the 1980s, the service sector of the economy is lagging behind other sectors. Two extremely costly services are health and education. With regard to education, the U.S. ranks second in terms of expenditure for elementary and secondary education and ranks last or nearly last in math and all categories of science among industrialized nations. Health and education will be modernized and restructured. The key issues are: (a) based on what beliefs, values, and research; (b) designed on what principles; and (c) restructured by whom (Groff, 1991).

C. Cognitive Synapses and Communication Technologies

Leaders have begun to realize the centrality of the brain and research in the cognitive sciences. Advances in research and development yielded communication and information technologies that have made it possible to transmit data, video, and voice instantaneously and simultaneously almost anywhere in the world. Human resource development systems will be created based on contemporary research in the cognitive sciences and the latest research in communication and information technologies.

Curriculum designers must produce High Performance Learners and Workers by (1) achieving greater efficiency from contemporary programs and (2) inventing outcomes based learning -- applications and solution oriented.

A. AGRICULTURAL ERA

People	Education-Training	Outcomes
Elite	Schools and Colleges	"Professions"
Others	Apprenticeships	Craftsmen

B. INDUSTRIAL ERA

Privileged	Academic Vocational General	Quality
Disadvantaged	Drop-out	Inequality

C. ADVANCED TECHNICAL ERA

Any location a learning environment

RETHINKING, RESTRUCTURING, REVITALIZING

FROM POST - INDUSTRIAL ERA (PIE)

TO

EARLY TECHNICAL ERA (ETE)

TO

ADVANCED TECHNICAL ERA (ATE)

1970s 1980s 1990s 2000s 2010s

OVERVIEW OF PROGRAMS FOR HIGHER EDUCATION

Nova University is a nontraditional institution committed to developing practitioner oriented, problem solving, field-based doctoral programs. Nova developed doctoral program that are in the Abraham S. Fischler Center for the Advancement of Education beginning in 1972: (a) Child and Youth Studies, (b) National Education Leaders, and (c) Programs for Higher Education (PHE).

Professionals who enroll as students in PHE select one of five specializations: Adult Education; Higher Education; and Vocational, Technical and Occupational Education; Computing and Information Technology (CIT started in 1993); and Health Care Education (started in 1994).

Professional who have responsibility for vocational, technical, and occupational education, at whatever level, are admitted to the VTOE specialization in PHE. They are also admitted to the Child and Youth Studies (CYS) program which is offered in traditional and multi-tech formats.

Students enroll in clusters throughout the United States. Cluster coordinators provide assistance to students as the liaison between students and other program personnel. A regional cluster was created in the early 1980s for international students and for individuals living in remote areas. The first group of international students consisted of 14 individuals from Taiwan who enrolled in P-HRD in 1986 but dropped out of PHE because of Ministry of Education requirements which have since been relaxed. The name was changed to International Cluster in 1992.

Each student completes six core seminars, two specialization seminars (four in CIT), four practicums, two summer institutes, comprehensives, and a Major Applied Research Project (MARP). The core seminars are held one Saturday per month during the nine month academic year. Core seminars are also offered two weeks prior to the Summer Institute and in a special format for students in the International Cluster. Two specializations are held in conjunction with the summer institutes with some work completed (a) prior to the summer institute, (b) during the summer institute and (c) following the summer institute. Students in the CIT specialization take two aditional seminars online during each of the two winter terms.

The week-long summer institutes focus on a theme and provide opportunity to hear international and national experts on the topic as well as concentrate on seminars, practicums, and PHE program requirements.

CORE SEMIARS

A major curriculum change was made at the meeting of the Higher Education Director's Team in February 1990. The decision involved the (1) conversion of the vocational, technical, and occupational education (VTOE) specialization seminar Personnel-Human Resources Development to the core seminar Human Resources Development (HRD) beginning fall 1990, (2) addition of Leadership as a sixth core seminar beginning fall 1991, (3) addition of a VTOE Trends and Issues specialization seminar for second year students beginning 1992, (4) elimination of Learning Theory, and (5) reduction of the number of practicums from five to four.

Leadership

Research indicates that leadership consists of three processes: (1) analysis, (2) visions, and (3) action plans; can occur at three levels: (1) self, (2) organizational, and (3) societal; and involves three sets of competencies: (1) conceptual, (2) interactive, and (3) technical.

As intitially conceptualized, the Leadership seminar was intended to (1) include research and theory, (2) provide an opportunity for creating visions and preferred scenarios and (3) require each student to experience the setting of strategic directions and translating them into broad stroke organizational development components and human resources development (OD + HRD) components. For example, assume a student had an interest in creating a student success program. What are the OD and HRD components?

Governance and Management

Governance and Management has been a core seminar for many years. An early version of the seminar consisted of (1) a focus on the forces which shape the missions of establishments, (2) an analysis of governance structure, and (3) a review of the processes by which establishments determined strategic directions and scope of work. The third unit traced the evolution of planning, management, and evaluation systems to the development of strategic planning.

The Governance and Management seminar from 1986 through 1991 emphasized (1) the structural dimension, (2) the human dimension, and (3) the work dimension - application of strategic planning. The 1992-93 G & M seminar emphasized (1) governance structure, (2) governance processes, and (3) scope of work - strategic planning.

Organizational development projects students have selected include the form and structure of strategic planning, student learning outcomes assessment systems, management information systems, and Total Quality....

Human Resources Development

Human Resources Development has its origins in Personnel - Human Resources Development (P-HRD) which was one of two seminars in the vocational, technical, and occupational education specialization. The other specialization seminar is the Emergence of Vocational, Technical, and Occupational Education (E-VTO). P-HRD and E-VTO complemented each other very well in that P-HRD had a focus on the workforces of the future and E-VTO had a focus on the workplaces of the future. P-HRD was flexible enough to accommodate professionals employed in education and training in a variety of contexts: health and human services, business and industry, government and the military, and schools and colleges.

HRD consists of three major topics: (1) an audit of HRD in the context in which each student works, (2) creation of a vision for an area of responsibility, and (3) development of a multi-year HRD action plan for the vision.

Content projects have included communication skills, computational skills, outcomes based education, science, technology, etc. Process topics included critical thinking, learning styles, problem solving, Total Quality..., etc. A student could select Total Quality and specify OD dimensions in G & M and the human dimensions in HRD.

Societal Factors

Societal Factors helps each student understand the demographic, social, economic, technological, and political variables that shape mission, purposes and program services.

Curriculum and Program Planning

A curriculum is the sum total of learning experiences that include (1) content formats, (2) delivery system formats, and (3) student learning outcomes formats.

Problem Solving

The Research and Evaluation core seminar introduces each student to three problem solving methodologies which are applied in practicums: (1) development, (2) evaluation and (3) research.

From Theory and Research to Applications

One hallmark of PHE is the application of theory and research to problems in a student's work context. Faculty use a variety of strategies and techniques to relate the didactic instruction to workplace problems.

HUMAN RESOURCES DEVELOPMENT

1. AUDIT HRD

MISSION
PHILOSOPHY
POLICIES
FUNCTIONS
BUDGET

2. VISION

STRATEGIC DIRECTION
PREFERRED SCENARIO
ORGANIZATIONAL DEVELOPMENT PLAN

3. HRD PLAN

CONCEPTUAL SKILLS
HUMAN RELATIONS SKILLS
TECHNICAL SKILLS
BUDGET

LEADERSHIP

THEORY AND RESEARCH

VISION AND PREFERRED SCENARIO

STRATEGIC DIRECTIONS

(ORGANIZATIONAL & HUMAN RESOURCES DEV COMPONENTS)

GOVERNANCE & MANAGEMENT	HUMAN RESOURCES DEVELOPMENT
AUDIT	AUDIT
VISION OF G & M	VISION OF HRD
ACTION PLAN	ACTION PLAN

STRATEGIC THINKING: MAXIMUM SYNERGISM =

LEADERSHIP THROUGH

OD + HRD + TQC

Pre Program Audit	Year 1	Year 2	Year 3	Year 4	Year 5	Post Program Audit
Organizational Development						
Mission Primary Program Secondary Program Climate/Culture Institutional Effectiveness						
Human Resources Development						
Conceptual Interactive Technical						
Hoped for Outcomes	←				→	Actual Outcomes

INTERNATIONAL CLUSTER HRD

The format for didactic instruction for the International Cluster has changed several times over the past decade. The format in 1993 consisted of one seminar each of two weeks prior to the summer institute. This format resulted in concentrating on one seminar per week and also made it possible for domestic students to complete one or two seminars. Information was distributed in spring and students complete some work prior to the summer institute, during the summer institute, and after the summer institute.

A letter of welcome, instructions and assignments with supplemental information, and study guide were sent to students in spring (see Appendix A). Supplemental information included (a) a personal data sheet to indicate progress in PHE, (b) an HRD work context audit list, (c) an example of an HRD vision and action plan for computer-based distance education, (d) a list of ERIC documents, (e) an ERIC Document Resume on restructuring, and (f) a "Request for UNIX Accounts" form to encourage students to go online. Each student completed (a) an audit of HRD in her/his work context and (b) a vision for an HRD project for her/his work context. Supplemental information was mailed periodically.

The morning of the first seminar session included introductions, overview of HRD, a brief presentation by each student of her/his work context and HRD focus, and the completion of the Kolb Learning Styles test and a modified Myers Briggs test that yields planning preferences. Two important HRD concepts are an understanding of (a) work context and (b) self - beliefs, values, predispositions. Scores were used to group students to accomplish objectives.

The afternoon of the first day was dedicated to visions using numerous examples such as "The Electronic Society," "Data and Information Processing as the Core of the High Technology Information Society," and "The Health Care Electronic Communications Network" which were used at North Central Technical College in the late 1970s and early 1980s (see Appendix B). Discussion focused on beliefs, values, principles, mission, and vision. A few students shared their visions for an HRD project with the group.

Other students shared their visions with the group in the early morning of the second day. The students were then grouped by planning preference to help co-create visions for HRD projects. Planning preferences consist of Strategic Humanists, Strategic Planners, Pragmatic Humanists, and Pragmatic Managers. Research has indicated that initial grouping by planning preference for visions co-creation is more important than grouping by topic. The affective domain plays an important part in bonding, cooperative learning, collaboration, and networking (see Appendix C).

A few comments were made about the need for a clear vision and mission and the relationship to goals for the HRD action plan. Visions and action plans can be content and/or process centered; they can be person or technology focused.

Dr. Madeleine Friedman presented a vision and action plan for "Science, Technology, and Society" (see Appendix D). She discussed "Visioning As A Gateway" and the two proposals for $1/2 million she has written since February.

The third day was dedicated to the development of an action plan for HRD projects. Examples included strategic planning and institutional effectiveness, total quality, student learning outcomes, enrollment management, center for effective learning, and elements necessary in understanding other cultures and ISO standards for trade with the European Community (see Appendix B). The morning was dedicated to clarifying and formatting goals and objectives. Students were grouped by the focus or topic of the HRD action plan.

Dr. Steven Vest demonstrated accessing the Electronic Library during the early afternoon (see Appendix E). Late afternoon was dedicated to action plan methodology, evaluation, and budget. Comments were made about the action plan paper and the final examination.

Early morning of the fourth day was dedicated to action plan development. Comments were made about grantsmanship. The Request For Proposals (RFP) was distributed for "Demonstration Projects for the Integration of Vocational and Academic Learning Program" (Federal Register, June 11).

Dr. Marian Gibney conducted a practicum workshop from 1:00 to 2:00 each day throughout the week. Because this author serves as a practicum proposal and report evaluator for Human Resources Development and the Emergence of VTO, he discussed evaluating practicums with the students.

The final examination was administered during the early afternoon session. The late afternoon session focused on practicums and MARP ideas (Appendix F is a list of HRD and EVTO practicums and MARP abstracts). The last presentation focused on both people and technology dimensions of HRD and included comments about HRD in a multi-tech format. Numerous reports contain information about visions and action plans, planning preferences, and the multi-tech delivery system (ED 335 519, ED 351 499, and ED 352 126).

The author facilitated a networking session at the Summer Institute on "Science and Technology: Impact on Workplaces and Workforces" (see Appendix G).

HIGH PERFORMANCE LEARNER AND LEADER

Ultimate Purpose

The ultimate purpose of graduate and postgraduate education is to design programs to promote improvement in the quality of services that are provided in a variety of different contexts and systems -- health and human services, business and industry, government and public service, and education and training. Leaders and curriculum developers have two challenges: (a) to analyze economic and technological variables to anticipate impact on workplaces and workforces of the future and (b) to achieve greater efficiency from contemporary programs and to invent new and more effective solution based learning systems.

Occupational Analysis

The Census Bureau collects information about employment outlook using ten major categories, four of which are labeled goods (agriculture, mining, construction, and manufacturing) and six of which are services (finance, government, transportation and utilities, self-employed, wholesale and retail, and services). The ten categories of economic establishments are a composite of many types of businesses including manufacturing (#4) and services (#9).

Three areas in manufacturing that are essential to the viability of the U.S. are #8 printing and publishing, #9 electric and electronic, and #19 instruments. Graphic communications are essential to everyone because of the relationship to literacy, productivity, and democracy. Commercial printing was the fourth largest manufacturing industry in 1992. Desktop electronic publishing is revolutionizing the printing and publishing industry.

Curriculum Development

Competency based education and training is an outgrowth of the "systems approach" consisting of inputs, process, and outcomes. Education which focused primarily on inputs during the industrial era made the transition to process during the early technical era. The focus will be on outcomes - problem solving - in the advanced technical era.

During the late 1970s and early 1980s, several colleges developed fully articulated 2+2 programs with area high schools and even had a few 2+2+2 articulated programs with universities. Several colleges and schools improved synchronization of student learning outcomes competencies with workforce and workplace needs through strategic planning. This required a major commitment of resources. Today, this can be accomplished electronically through computer-based distance education. An online format can

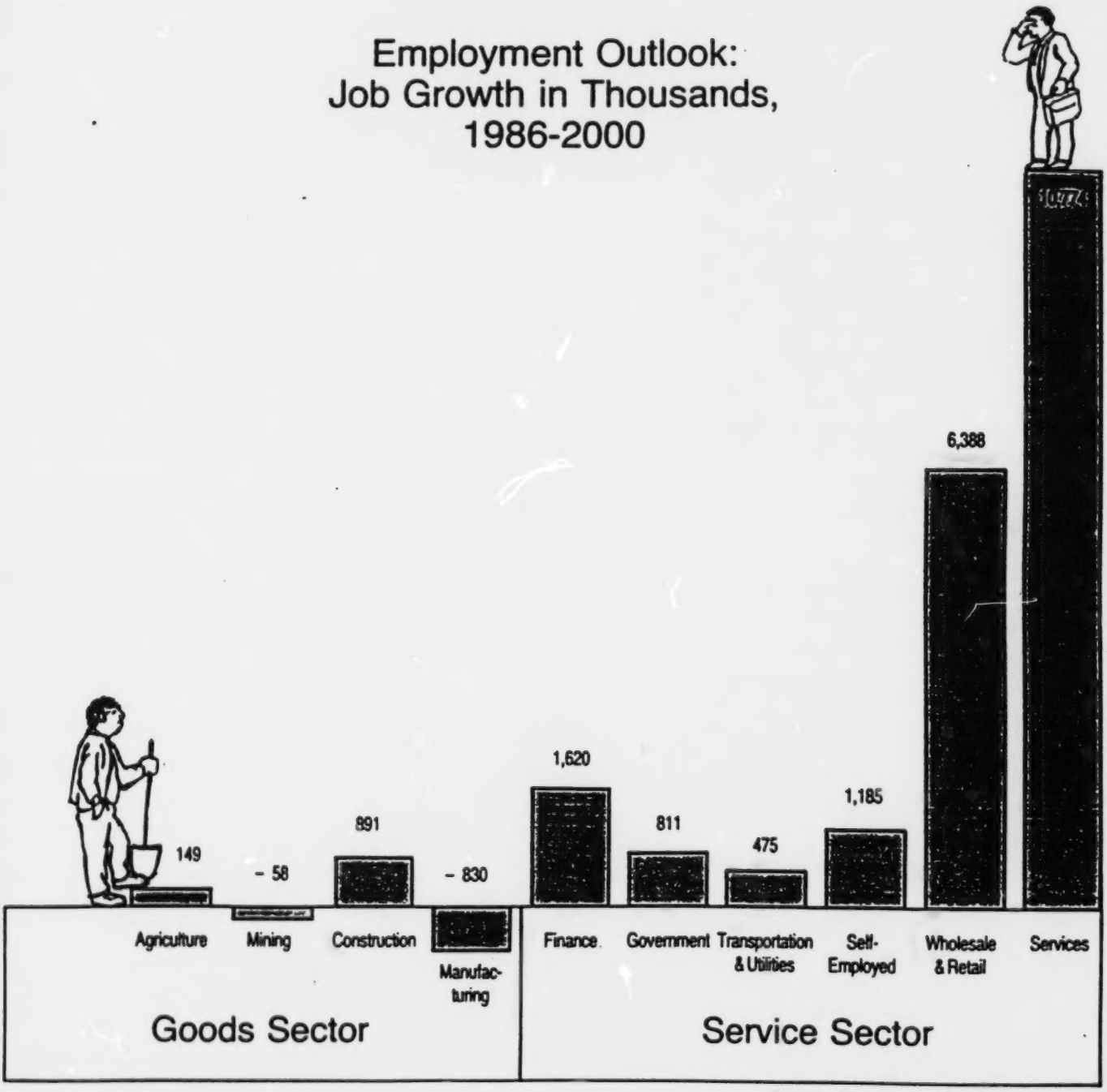
accomplish vertical articulation between the layers of the bureaucratic levels, horizontal integration between academic and technical tracks, and synchronization between education and workplaces. Furthermore, the electronic format makes it possible to access many resources through INTERNET.

In an effort to regain some of our competitive edge, the U.S. Department of Education has funded 22 skills standards projects. These projects will set minimum standards for various occupations over the next three years. Two organizations play a major role in the industry: the Research and Engineering Council (REC) of the Graphic Arts Industry, Inc. in Chadds Ford, PA, and the Graphic Arts Technical Foundation (GATF) in Pittsburgh, PA. REC monitors scientific and technological advances in printing and publishing and (a) synthesizes trends and issues and (b) conducts programs for the industry. GATF has been engaged in task analysis for many years and converting the information into training programs for the industry. GATF will set skills standards for the industry over the next few years and will field test some of the standards online. Graphic arts standards could be included in a "Science, Technology, and Society" developmentally appropriate curriculum from elementary through postsecondary education levels. Such an outcomes/solution based system is possible between schools, colleges, and business and industry.

Genuine partnerships can emerge between schools and colleges. A partnership of schools and colleges could create a seamless articulated-integrated program with generic and domain-specific competenices. Generic skill areas could include the basics as well as critical thinking, communications, higher-order reasoning, problem solving, cultural diversity, and teamwork. Domain-specific skills could include the skills standards for various occupations such as printing and publishing, ISO 9000 standards necessary to trade with the European Community, and standards necessary to trade with Pacific Rim countries. Pacific Rim countries are adopting alternative education. The Southeast Asian Ministers of Education Organization (SEAMEO) has identified distance education as a major thrust in the immediate future (Habana, 1993).

Restructuring is occurring throughout the world. It is particularly noticeable in manufacturing. Education and training will be restructured at all levels. The major issues are in what way, how, and by whom. The graduate education programs that survive the 1990s will restructure to produce a **High Performance Learner and Leader** who in turn can become change agents to restructure education and training to produce **High Performance Learners and Workers.**

Employment Outlook: Job Growth in Thousands, 1986-2000



Source: Bureau of Labor Statistics, 1987

ECONOMIC ESTABLISHMENTS

1. Agricultural services, forestry, fisheries
2. Mining
3. Contract construction
4. Manufacturing
5. Transportation & public utilities
6. Wholesale trade
7. Retail trade
8. Finance, insurance, real estate
9. Services
10. Non-classified

MANUFACTURING (#4) ESTABLISHMENTS

1. Food & Kindred Products
2. Tobacco
3. Textile Mill Products
4. Apparel & Other Textile Products
5. Lumber & Wood Products
6. Furniture & Fixtures
7. Paper & Allied Products
8. Printing & Publishing
9. Chemical & Allied Products
10. Petroleum & Coal Products
11. Rubber & Misc. Plastic Products
12. Leather & Leather Products
13. Stone, Clay & Glass Products
14. Primary Metal Industries
15. Fabricated Metal Products
16. Machinery, Except Electrical
17. Electric & Electronic Equipment
18. Transportation Equipment
19. Instruments & Related Products
20. Miscellaneous Manufacturing Industries
21. Administrative & Auxiliary

SERVICES (#9) ESTABLISHMENTS

1. Hotels & Lodging Places
2. Personnel Services
3. Business Services
4. Auto Repair Services
5. Miscellaneous Repair Services
6. Amusement & Recreational Services
7. Health Services
8. Legal Services
9. Educational Services
10. Social Services
11. Museums, Botanical, Zoological
12. Membership Organizations
13. Miscellaneous Services
14. Administrative & Auxiliary

#4. MANUFACTURING

#8. PRINTING AND PUBLISHING

- LITERACY, PRODUCTIVITY AND DEMOCRACY

- EQUALITY AND QUALITY

#9. ELECTRIC AND ELECTRONIC

#19. INSTRUMENTS

#9. SERVICES

#7. HEALTH SERVICES

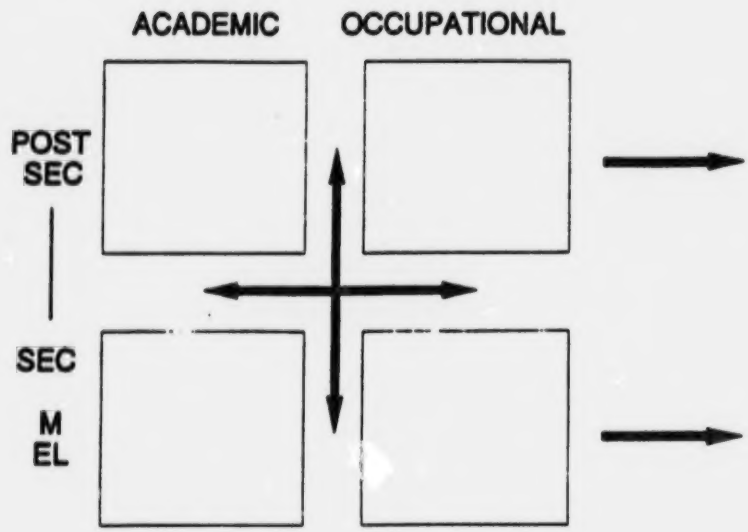
- ACCESS, COSTS, AND QUALITY

#9. EDUCATION SERVICES

- WOMB TO TOMB "FULL SERVICE"

#10. SOCIAL SERVICE

EDUCATION WORKPLACES



NEXT GENERATION TECH-PREP PROGRAM

	YEAR 1	YEAR 2	YEAR 3
REFINEMENT 1. AUDIT 2. INTEGRATION 3. "CLINICAL"			
DISSEMINATION 1. TRAINING 2. TECHNICAL ASSISTANCE 3. REPLICATION			
EVALUATION			

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Samuelson, Robert J. "A Shakeout in Services." Newsweek. August 5, 1991, Vol. CXVIII, No. 6, pp. 64-65.

Secretary's Commission on Achieving Necessary Skills. Washington, DC: U.S. Department of Labor. What Work Requires of Schools, 1991. Learning A Living: A Blueprint for High Performance and Skills and Tasks for Jobs, 1992

U.S. Technology Policy. Washington, DC: Office of Science and Technology Policy, 1990.

APPENDIXES

A. Welcome Letter and Instructions and Assignments
B. Information for HRD Visions and Action Plans
C. Planning Preferences
D. "Science, Technology, and Society"
E. Electronic Library
F. Practicums and MARPS
G. Science and Technology: Impact on Workforces and Workplaces

* * * * * * * * * *

A "Third Wave" Electronic College

Judith W. Leslie uses Toffler's The Third Wave to develop an educational institution in an advanced technical era dominated primarily by electronic media.

> This methodology would allow the learner to proceed at his/her own rate and style, within his/her own time period, at his/her desired location, drawing upon learning materials from throughout the country and the world. Computer science and electronics courses and programs of study would be an integral part of the curriculum. Faculty would be cross-trained in a variety of disciplines and teaching styles. They would have flexible work schedules and loads and might share an assignment with a spouse or colleague. Many faculty would instruct from their home or electronic cottage....
>
> Judith W. Leslie. "As The Third Wave Approaches Higher Education: Planning For the Electronic Institution," CAUSE/EFFECT, January 1981, Vol. 4, No. 1, p. 15.

Appendix A

Welcome Letter and Instructions and Assignments

TO: Students in the International Cluster

FROM: Warren H. Groff

RE: Human Resources Development (HRD) Seminar

DATE: February 1993

It is with a great deal of anticipation that I write to you about the HRD seminar. I am exceedingly pleased that we will be working together on a series of learning activities that will be challenging, exciting, and relevant to you. I will do my best to make it a very rewarding experience.

We are privileged to live during an extraordinary time -- the turning of an era. The world is passing from an industrial era to a technical era based on rapid generation and use of information. The key economic resources will no longer be raw material extracted from earth and unskilled and semiskilled labor. The essential resources are information and knowledge used by individuals, hence the need for HRD.

The conceptual framework for HRD is (1) analysis, (2) vision and (3) action plan. The specific assignments for this three part conceptual framework are described on the attached "Instructions and Assignments for HRD." We will discuss ideas for practicum proposals which could lead to ideas for Major Applied Research Projects (MARPs).

If you have a portable personal computer, consider bringing it to Florida. If you have a PC and a modem, consider getting online. A "Request for UNIX Accounts" is enclosed. You can access Electronic Library, ERIC, and other resources through INTERNET (enclosure).

I really look forward to working with you so that you have an extremely rewarding experience in our program.

Instructions and Assignments for Human Resources Development

The purpose of this document is to provide instructions and assignments for the Human Resources Development Seminar. The first date on which we will meet is July 26, 1993.

Research indicates that most change is attributable to human resources who use technology. Research about HRD indicates that a leader must (1) analyze strengths and weakness of the existing context, (2) develop a vision of the future, and (3) specify an action plan. These three activities are the conceptual framwork of the HRD seminar.

Each student should read the Study Guide, textbook, and primary references before starting the first assignment.

Assignment #1. Analyze the strengths and weaknesses relative to HRD of the context in which you work. You should state the mission and describe the functions of your establishment and then discuss the philosophy and policies that deal with HRD. You could analyze your establishment's strategic plan and the extent to which HRD is a part of the plan. You could analyze HRD programs and activities. (See attached list). You could analyze human behavior within the establishment. Relate theory and research with practice. You may include charts and may have appendices.

The body of your paper shall not exceed ten (10) type written, double spaced pages excluding charts, tables, bibliography, and appendices. The paper must be in my possession by Friday, July 2, 1993, so I can review the assignments before our first meeting. Use the Publication Manual of the American Psychological Association. Staple your paper in the upper left corner. Do not use binders or folders. These specifications apply to all papers. Please send a Vita or Resume with the first paper along with the "Personal Data" and "Student Progress" sheet. Use mail that does not require my signature. Mail your paper to Warren H. Groff, 1531 Peabody Avenue, Memphis, TN 38104. (901)-725-5287. My e-mail code is groffw.

Assignment #2. Create a vision of the future and a preferred scenario for an HRD project of interest to you. Strategic thinking should produce a long-term vision of the future based on an analysis of alternative scenarios and the specification of a preferred scenario. The vision of the 1990s should be based on an analysis of a broad range of demographic, social, economic, technological, and political variables. A project could be content-centered or process-centered but should focus on some HRD activity for which you have some responsibility. For example, perhaps you have responsibility for writing across the curriculum, a comprehensive learning center, or student learning outcomes assessment. Perhaps you are interested in nontraditional

education or distance learning through computer based multi-tech delivery systems like the attached example by Judy Lever. What is your vision of the future and your preferred scenario based on HRD internal strengths and weaknesses and external opportunities and threats? What are the HRD requirements to achieve the preferred scenario?

You may either send this assignment to me so that it arrives at my home by July 23 or bring it to Florida.

Because students can learn a great deal from an analysis of other contexts, each person will make a brief presentation of no more than five minutes about the context in which s/he works and the vision for your project. Handouts and a visual or two would be most appropriate. We will discuss significant concepts and their implications.

We will create and co-create a multi-year action plan for your vision in Florida on July 26-29.

I will give the final examination required of core seminars and we will discuss ideas for a practicum in HRD.

Assignment #3. Develop a multi-year action plan for HRD for your project. What conceptual, human relations, and technical skills should people acquire to improve quality? This assignment shall be sent to me by the end of August.

Documents You May Find Of Interest

ED 272 772 Perspectives on the Education and Training System of the Future. Paper written for ERIC Clearinghouse at The Ohio State University.

ED 280 538 The Learning Community of the Future: Education and Training in the 21st Century. Paper presented to the Commission on the Future of Community Colleges of the Am. Assoc. of Community and Junior Colleges, April 24, 1987.

ED 287 347 The Independent Learner: The Key Characteristic in Transformation Leadership. Paper presented at the Fifteenth Annual Summer Institute for Higher Education Programs for Nova University, July 27, 1987.

ED 335 519 Toward the 21st Century: Preparing Strategic Thinkers in VTO Education for Restructuring Establishments.

Community College Futures: From Rhetoric To Reality edited by Neal A. Norris. Stillwater, OK: New Forums Press, 1989.

ED 343 484 Restructuring for the 90's...And Beyond: The Era of Smart Homes, Wired Communities, Fast Systems, Global Networks, and Fast Forward Learners in a Borderless World.

Personal Data

_____, _____ _____
Last Name (Print) First Name (Print) UNIX user code

_____
Number and Street

_____
City State/Country Zip

Home Telephone ( )_____

Work Telephone ( )_____

Student Progress

Please indicate the term you started the Nova program, the sequence you took core and specialization seminars, and practicum status -- ideas, proposals accepted, accepted proposals being worked on, and completed practicum report.

Term program started_____,19___
Fall, Winter, Spring

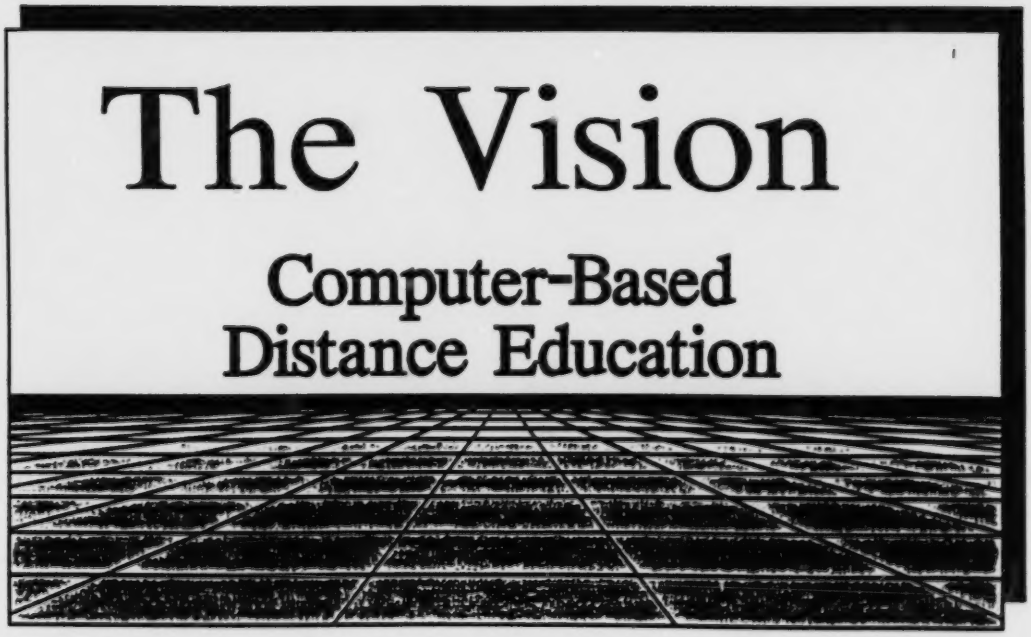
I - Idea
P - Proposal
W - Working
R - Report

Seminar	Practicum or Idea (Indicate Status)
1. _____	
2. _____	
3. _____	
4. _____	
5. _____	
6. _____	
7. _____	
8. _____	

Major Applied Research Project: (Check One & List Topic)
__ Idea __ Prospectus Approved __ Proposal Approved

Current Options for Educational Technology

- ☐ Curriculum Integration
- ☐ Multimedia
- ☑ Distance Education



The Distance Education Vision: Project Outreach

The Homestead Campus of Miami-Dade Community College has identified computer-based distance education as a primary initiative in its strategic plan for technology. The various aspects of this initiative have been grouped together under an umbrella concept called Project Outreach. This project is an effort to address the college's mission of providing appropriate educational opportunities to the metropolitan Dade County community. Using technology, the project hopes to increase access to the abundant educational opportunities available on campus.

Goals:
The overall goal of this initiative is the creation and implementation of an effective distance education program for this campus.
The specific goals of this initiative include:

1. The development of a replicable technology solution for distance education
2. The creation of an instructional design model for distance education that can be used as a foundation for curriculum development.
3. The development of user-friendly software systems to support distance education.

Year 1

Objectives:
The technology team implementing Project Outreach will:

1. Institute a training program to provide faculty, staff and administrators with the necessary technology skills.
2. Create an instructional design model that can be used as a basis for distance delivery.
3. Reorganize existing computer labs to support pilot courses based upon the new instructional design.
4. Incorporate distance education facilities in the planning of the campus technology building under construction.
5. Initiate the League for Innovation project in order to gain additional data on current practices in distance delivery.
6. Prepare and submit grants to provide additional funding for the initiative.

Evaluation:
Review of computing capabilities, Teacher Review of instructional design model, League review of project
Budget:
Equipment/Personnel costs: $80,000

Year 2

Objectives:

1. Create and test pilot courses using the instructional design model.
2. Search for, evaluate and identify software appropriate to distance education.
3. Begin acquisition and testing of hardware and software necessary for distance delivery.
4. Organize and coordinate the League for Innovation project committee's efforts in the development of a distance education model.

Evaluation:
Student evaluation of piloted courses, League approval
Budget:
Operating costs: $5,000

Year 3

Objectives:

1. Implement hardware solutions for distance delivery of pilot programs.
2. Expand distance education approaches in pilot programs to include all possible media available on campus.
3. Adjust and test pilot curriculums to reflect the inclusion of additional media.
4. Develop and implement a marketing plan for distance education courses.

Evaluation:
Successful computer delivery, Student evaluation of piloted courses
Budget:
Equipment and Development costs: $150,000

Year 4

Objectives:

1. Expand the pilot program to develop and test courses in additional content areas.
2. Identify and train distance education faculty and staff in the delivery technology.
3. Fully implement and test distance delivery of pilot programs.

Evaluation:
Successful computer delivery, Student evaluation of piloted courses, Teacher training evaluations
Budget:
Training and Development costs: $5,000

Year 5

Objectives:

1. Evaluate the effectiveness of the distance education approaches and curriculum.
2. Disseminate Project Outreach to interested institutions.

Evaluation:
Response to published results
Budget:
Dissemination costs: $2,000

TO:

FROM: Warren H. Groff

RE: Human Resources Development (HRD) Seminar

DATE: June 1993

I am delighted that you are enrolled in the Human Resources Development (HRD) core seminar of the International Cluster. There are 14 students enrolled in the seminar.

The conceptual framework for the seminar is (1) analysis, (2) vision, and (3) action plan. The analysis of HRD in the concext in which you work should be sent to me in Memphis so that I receive it by Friday, July 9, 1993. I prefer that the second paper on a vision and preferred scenario be sent to me in Memphis. If pressed for time, the paper can be brought to Florida.

Enclosed are the following:
1. A list of seminar participants,
2. A list of sources of information, and
3. An ERIC Document Resume which contains student's work.

It is a pleasure to be working with you.

SOURCES OF INFORMATION

The Nat. Council for Staff, Program and Org. Dev.(NCSOD)
Community College Leadership Program
The University of Texas at Austin, EDB 348
Austin TX 78712 512-471-7545

National Staff Development Council
P.O. Box 240
Oxford, OH 45056 800-727-7288

Pew Health Commission
3101 Petty Road, Suite 1106
Durham, NC 27707 919-489-5907
Healthy America: Practitioners for 2005 A Beginning Dialogue for U.S. Schools of Allied Health.

National Center on the Educational Quality of the Workforce
4200 Pine Street, The Univesity of Pennsylvania
Philadelphia, Pennsylvania 19104-4090 215-898-4585

National Tech Prep Clearinghouse of Resources
East Central Curriculum Coordination Center
Sangamon State University, F-2
Springfield, IL 62794-9243 217-786-6375

American Society for Quality Control
611 East Wisconsin Avenue
Milwaukee, WI 53202 800-248-1946
ASQC is doing a great deal of work with ISO 9000 standards.

National Center on Education and the Economy
39 State Street, Suite 500
Rochester, New York 14614 716-546-7620

Center on Education and Training for Employment and the
ERIC Clearninghouse on Adult, Career, & Vocational Education
The Ohio State University, 1900 Kenny Road
Columbus, Ohio 43210-1090 800-848-4815

National Center for Research in Vocational Education
University of California at Berkeley
2150 Shattuck Avenue, Suite 600
Berkeley, CA 94704-1306 415-642-4004

New American Schools Development Corporation
1000 Wilson Boulevard, Suite 2710
Arlington, VA 22209 703-908-9500

The Center for Occupational Research and Development (CORD)
and National Coalition of Advanced Technology Centers
and National TechPrep Network
601-C Lake Air Drive
Waco, TX 76710 800-772-8756

TO:

FROM: Warren H. Groff

RE: Human Resources Development

DATE: September 1993

Congratulations on the successful completion of Human Resources Development. You are a part of a new generation of High Performance Learners and Leaders, a person becoming a Human Resources Development Design Engineer who will help create new caring and learning environments so that future generations can have improved quality of life.

It has been a pleasure working with you. Best wishes as you continue you journey of learning.

* * * * * * * * * *

CREATING SOMETHING NEW AND FRESH

> The major task for society and the economy is to create something new and fresh as opposed to just improving on the old.

Peter Drucker. Innovations and Entrepreneurship Principles and Practices. New York, NY: Harper and Row, Inc., 1985.

TO: Students Enrolled in HRD, July 26-29

FROM: Warren H. Groff

RE: Paper #1 (Analysis) and Paper #2 (Vision)

Date: July 11, 1993

We are rapidly approaching the date when we will begin to meet for HRD in Florida. Several students have already completed excellent visions of an HRD project. If possible, send the assignment to me in Memphis. If you become pressed for time, bring the assignment to the hotel. I will arrive at the Sheraton Suites Plantation in the afternoon on Sunday, July 25.

You will be asked to make two presentations early in the week. One presentation on Monday will be on the analysis of HRD in the context in which you work. Bring handouts. You are encouraged to use a few visuals. We will synthesize significant concepts and their implications.

The second presentation will be on the vision for your HRD project. One person's HRD project will focus on developing a system for learning disabled students. Another person's project will focus on a multi-agency collaborative venture in which programs and services, designed to have students succeed, will operate in a wholistic manner. Another student's HRD project will focus on the general education skill competencies in six areas and the relationship to allied health programs. Have a conceptual framework for your HRD project that you can present to the class.

I look forward to working with you.

Appendix B

Information for HRD Visions and Action Plans

Conceptual frameworks play a major role in expanding the range of opportunities students begin to envision as possible scenarios. Feedback suggests that two conceptual frameworks greatly expand the range of ways of thinking strategically. The first is "Components of a Human Resources Development System" in Learning Communities of the Future (1987) in which communication and information technologies are the core of the learning enterprise.

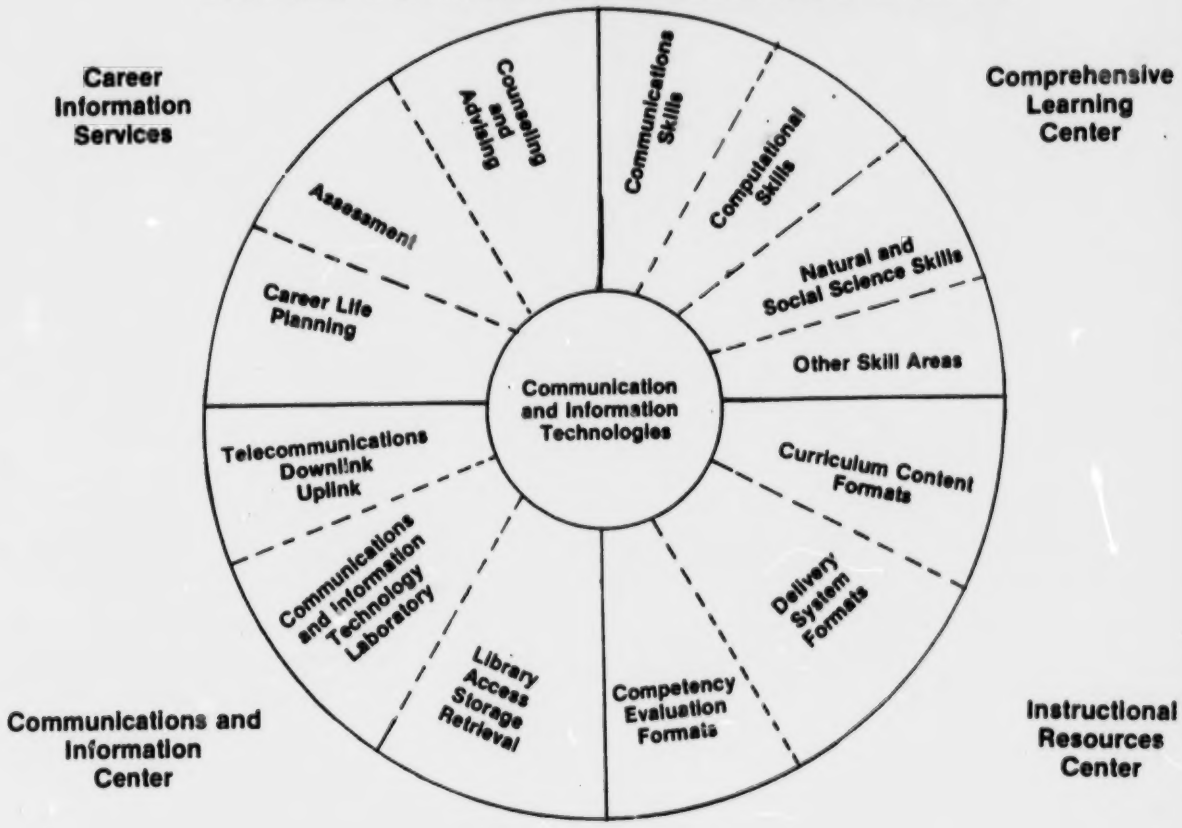
The second conceptual framework is "Info Era Learning Communities of the Future" which was the result of analysis of education restructuring in the 1980s and a workshop on "Alternative Education" for the Arkansas State Department of Education in 1989. The analysis led to the classifications of (a) contemporary traditional education, (b) partial technological/technology intensive, (c) collaborative lifelong learning, and (d) solution based learning.

A solution based learning environment is intended to produce lifelong high performance learners and workers by placing more emphasis on critical thinking and problem solving. Problem based learning was a conceptual framework developed by McMaster University School of Medicine in Ontario, Canada, about 25 years ago. About 10 universities in the U.S. have adopted problem based learning. The John A. Burns School of Medicine at the University of Hawaii was the first school to convert entirely to the new system. Others, including Harvard Medical School, offer a choice of traditional or problem based tracks or a hybrid of the two. The World Health Organization published an evaluation of the 10 schools using problem-based learning. Problem solving skills and retention of medical students increased in the alternative problem based educational format.

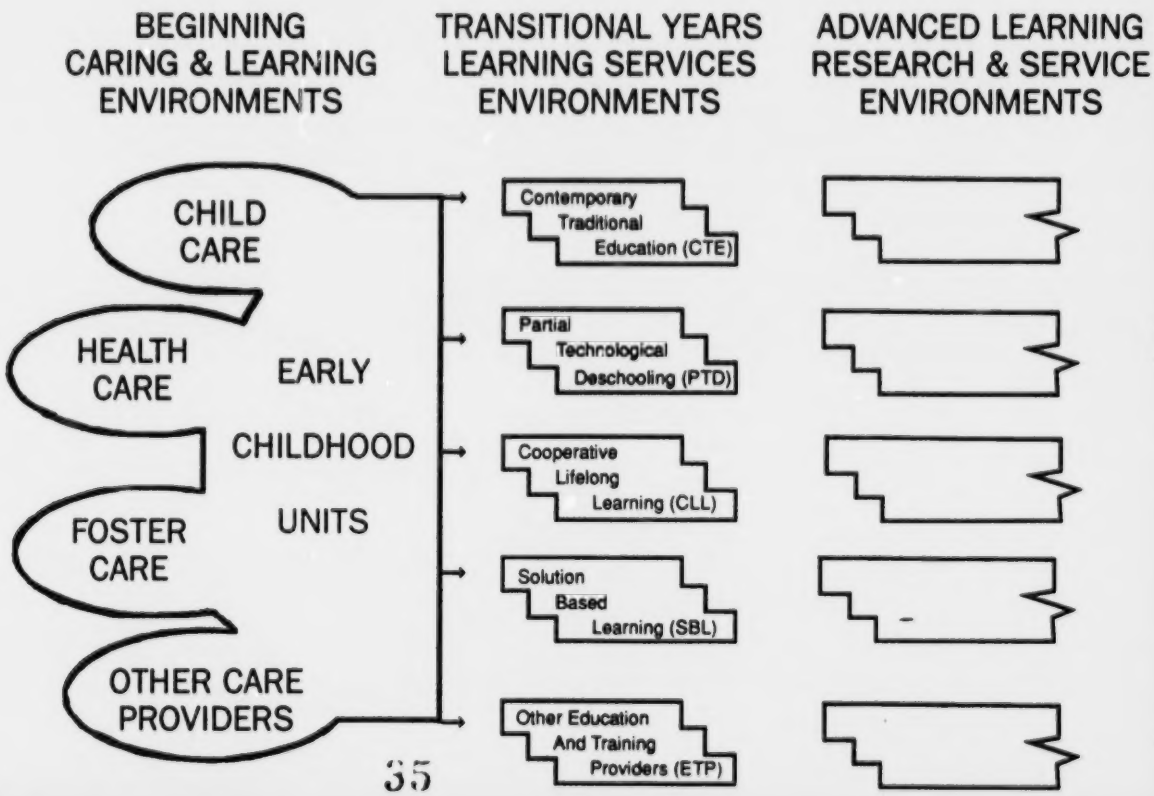
During the first two or three years of traditional medical training, students spend long days in lectures and late nights in memorizing overwhelming volumes of theory or fact. In traditional medical school training, students rarely discuss patients or their symptoms. Interns taught the traditional way have shown a great deal of dependence on their supervisors in finding answers to problems. In the problem based education approach, students interact with patients and research a variety of medical science subjects in order to solve specific clinical health problems rather than attending lectures that cover only one subject such as pathology or physiology. The mass of knowledge is changing so rapidly that by the time a student graduates from medical school, much of what was memorized is out of date.

Other conceptual frameworks are included in Appendix B.

COMPONENTS OF A HUMAN RESOURCES DEVELOPMENT SYSTEM



INFO ERA LEARNING COMMUNITIES OF THE FUTURE



ELEMENTS OF THE STRATEGIC GOAL OF COMPUTER LITERACY 1979

Systems Analysis and Design

Language Proficiency
- **Data Processing**
- **Engineering**

Application
- **Computer Aided Design (CAD)**
- **Computer Aided Manufacturing (CAM)**
- **Inventory Control**
- **Statistical Quality Control**

Conducting Longitudinal Studies of Student Progress

Computer Assisted/Managed Instruction
- **Writing a Program**
- **Using a Program**

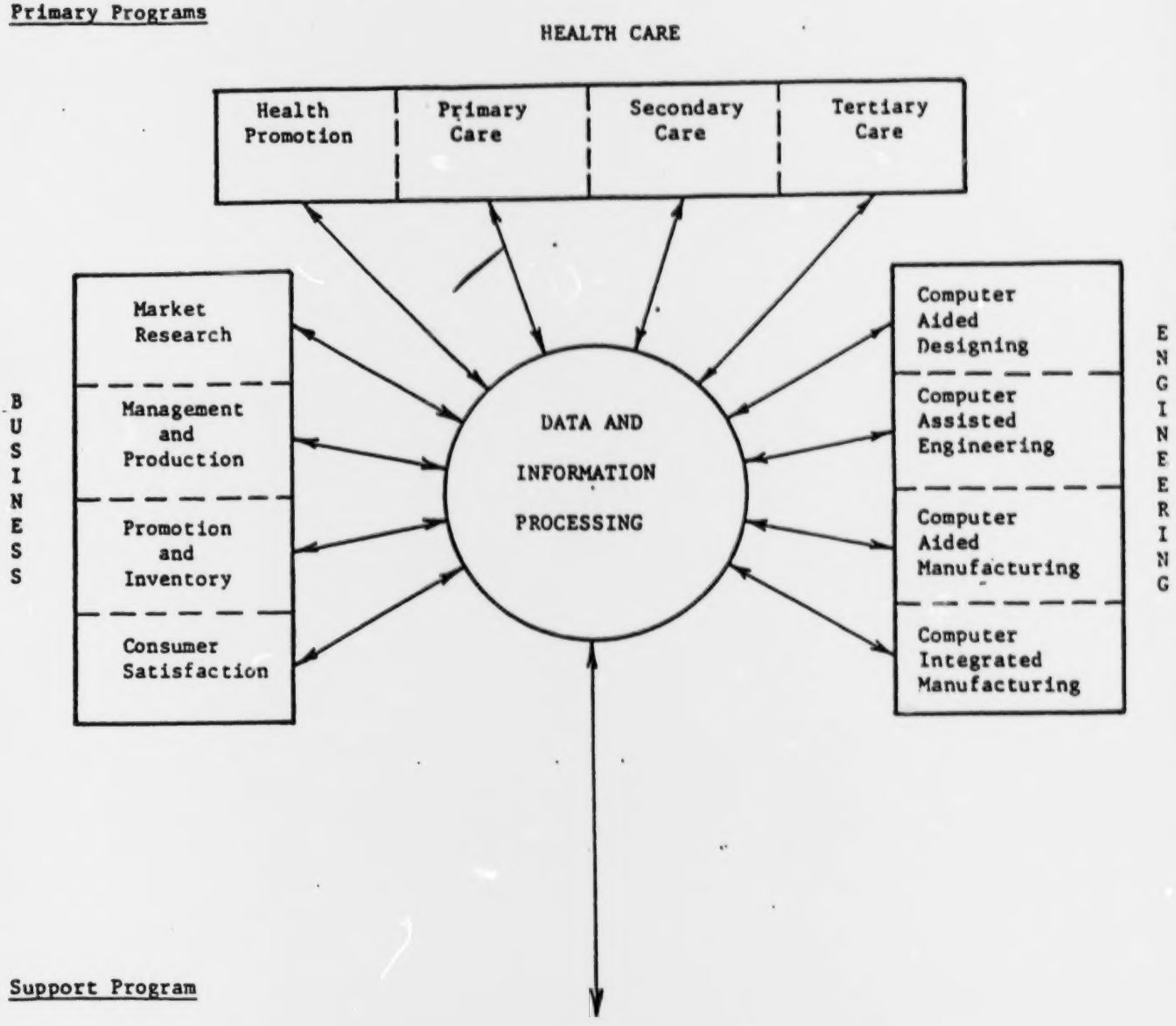
Use of Optical Mark Sensing Equipment
- **Upgrading Student Data Base**
- **Test Grading**

Use of Word Processing Equipment as Input

Reading a Printout

DATA AND INFORMATION PROCESSING AS THE CORE
OF THE HIGH TECHNOLOGY INFORMATION SOCIETY

Primary Programs

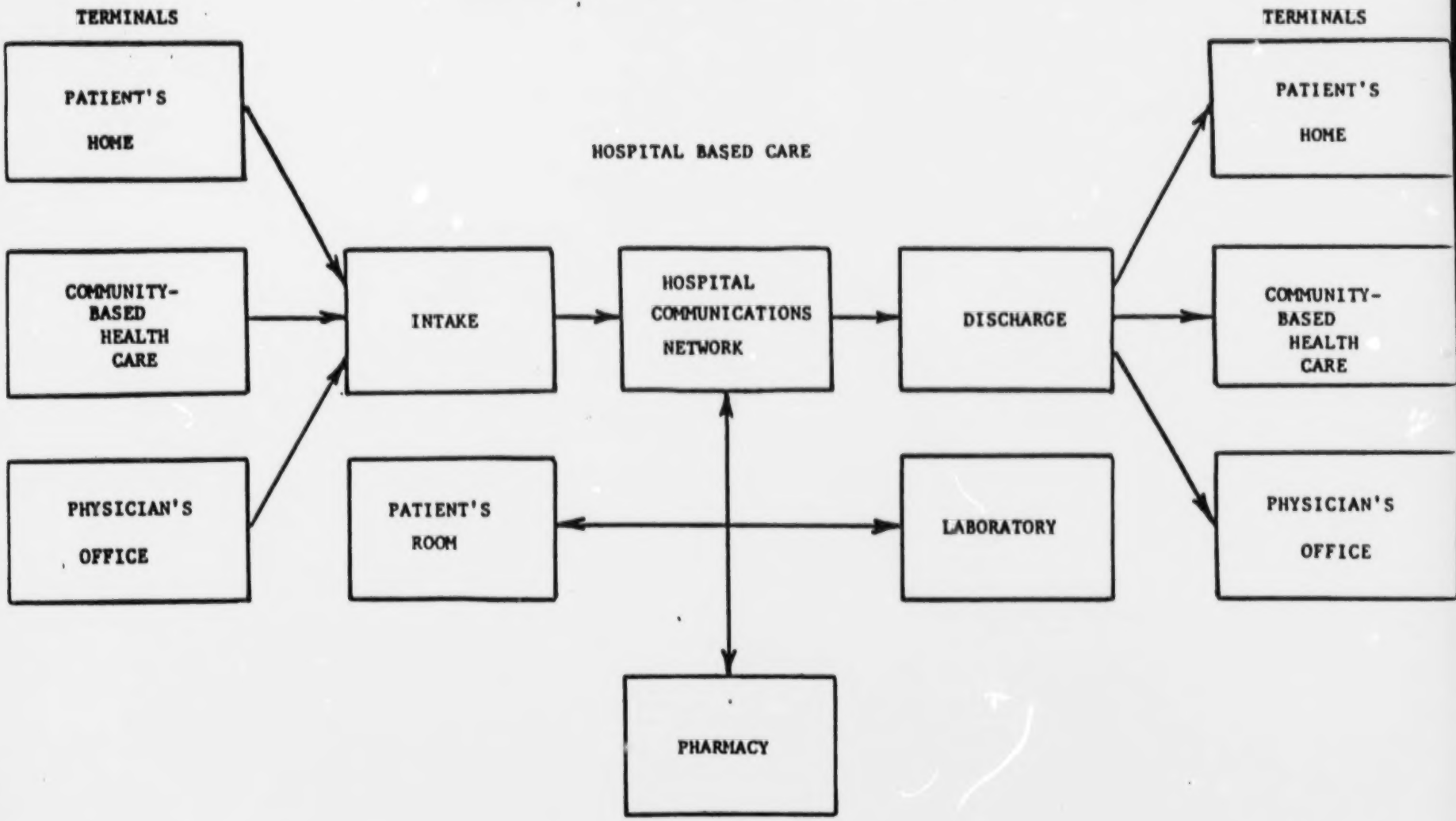


Support Program

Strategic Planning, Management, and Evaluation

Market Analysis					Outcomes and Impact Analysis

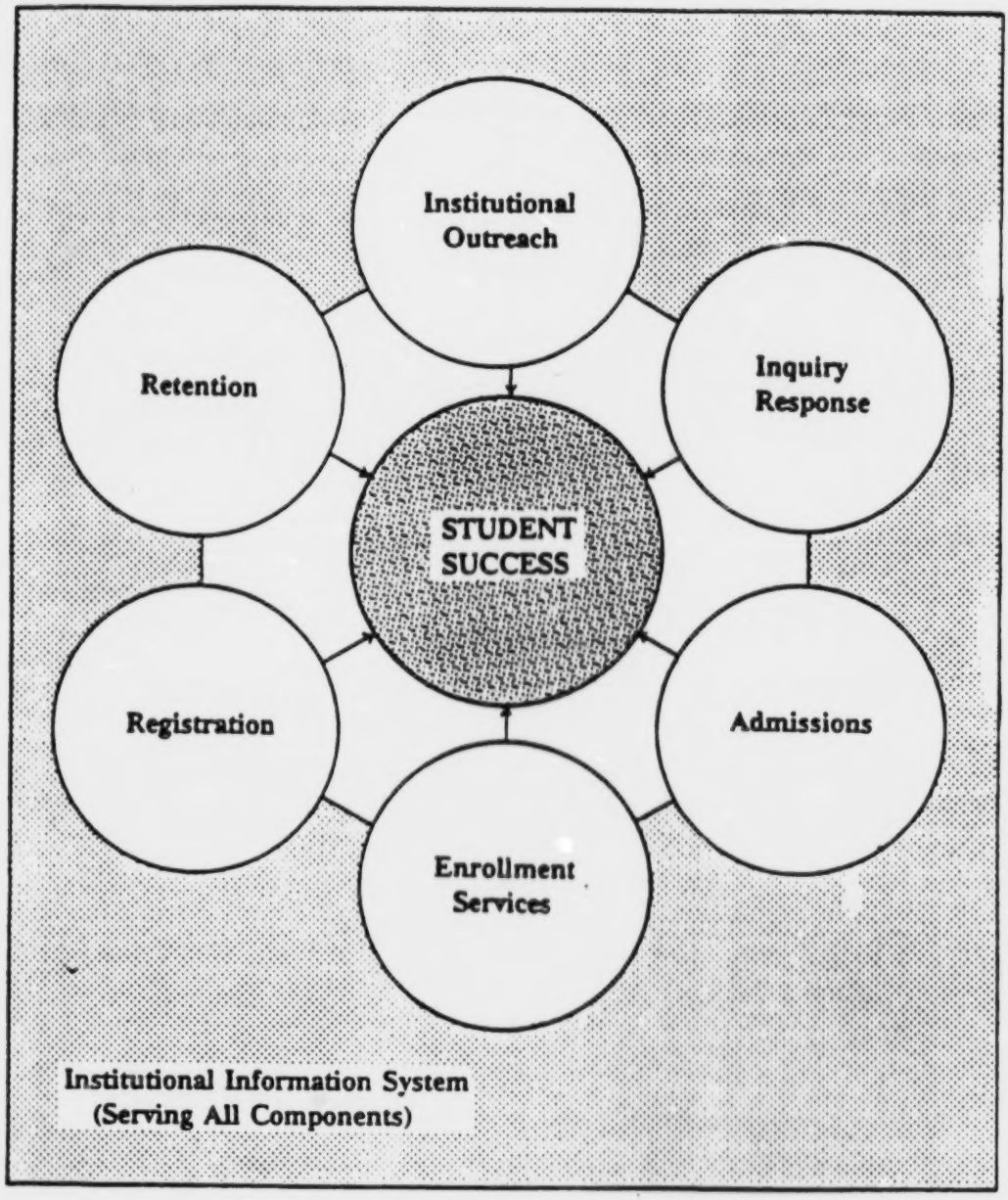
THE HEALTH CARE ELECTRONIC COMMUNICATIONS NETWORK



FRAMEWORK FOR FORMULATING AN INSTITUTIONAL TECHNOLOGICAL PROFILE

Institutional Function	TECHNOLOGY				
	Phase One (Record Keeping	Phase Two (Communication)	Phase Three Creative Use of Information Technology; CA1, CAD/ CAM	Phase Four (Decision-Making)	Phase Five (Artificial Intelligence)
Instruction	Select Applications Individualized Basis	Limited All-in-one Office Automation	Data Processing Curricula Faculty Literacy Program CA1, TICCIT, TEACH CAD/ CAM, ESL		
Instructional Support	Library Automation Fitness Centers Laboratories	Library Automation	Laboratories		
Student Services	Student Information Systems FAMS Degree Audit Transcript Job Placement	Student On-line Registration CARL Electronic Articulation			
Institutional Port	HRS, FRS Budget Purchasing Alumni Maintenance	All-in-one Office Automation Videotext Upload/Download Telecommunications Training	Budget End-user Programming Training		

ENROLLMENT MANAGEMENT SYSTEM

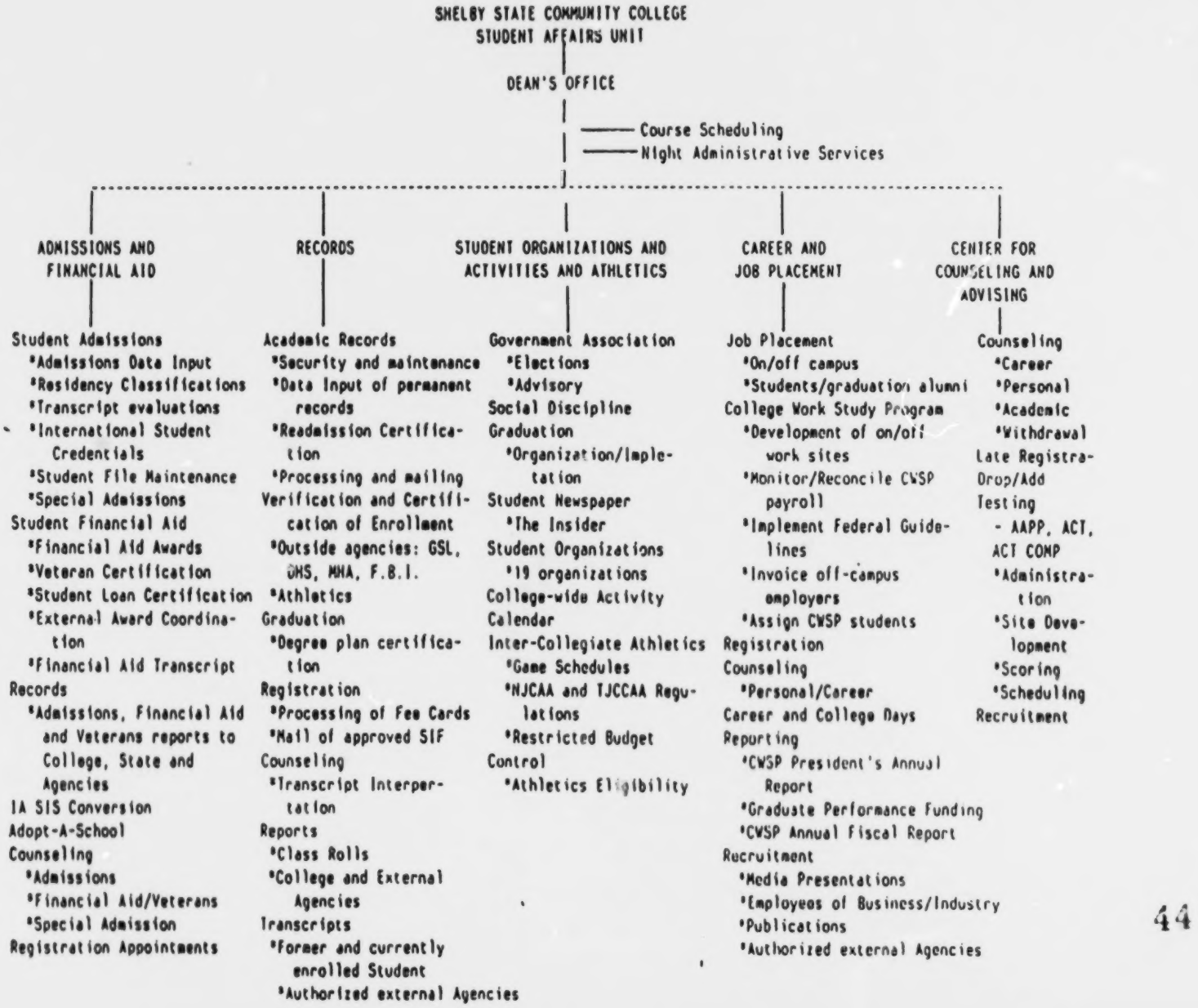


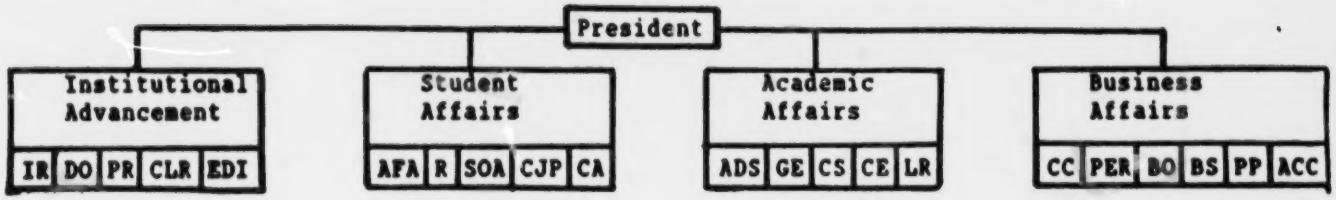
Shelby State Community College
Memphis, Tennessee

November 16, 1988

INSTITUTIONAL UNITS RESPONSIBLE FOR IMPLEMENTING ENROLLMENT MANAGEMENT SYSTEM COMPONENTS

	Responsible Unit
A. INSTITUTIONAL OUTREACH	
1. Public Relations	Institutional Advancement
2. Focused Marketing	Institutional Advancement
3. Recruitment	Student Affairs
4. Community Services	Instit Advance/Acad Affairs
B. INQUIRY RESPONSE	
1. Student Prospect Management	Student Affairs
2. Admissions Counseling	Student Affairs
3. Financial Aid Counseling	Student Affairs
C. ADMISSIONS	
1. Admissions Processing	Student Affairs
2. Applicant List Management	Student Affairs
D. ENROLLMENT SERVICES	
1. Course Placement Testing	Student Affairs
2. Nev Student Orientation	Academic Affairs
3. Academic Advising	Academic Affairs
4. Personal and Career Counseling	Student Affairs
5. Academic Program Orientation	Academic Affairs
6. Financial Aid Processing	Student Affairs
7. Support Services Referral	Student Affairs
8. Records Processing	Student Affairs
E. REGISTRATION	
1. Course and Schedule Management	Academic Affairs
2. Registration Processing	Student Affairs
3. Drop-Add Processing	Student Affairs
F. RETENTION	
1. Instructional Delivery	Academic Affairs
2. Program Development	Instit Advance/Acad Affairs
3. Job Placement	Student Affairs
4. Internal Public Relations	Institutional Advancement
5. Student Activities	Student Affairs
6. Pre-Withdraval Counseling	Stu Affairs/Acad Affairs
7. Business Office Services	Business Office
G. INSTITUTIONAL INFORMATION SYSTEM	
1. College and Community Research	Institutional Advancement
2. Institutional Evaluation	
3. Degree Monitoring	Academic Affairs
4. Systematic Information Feedback	Institutional Advancement


SHELBY STATE COMMUNITY COLLEGE
STUDENT AFFAIRS UNIT
DEAN'S OFFICE
Course Scheduling
Night Administrative Services
ADMISSIONS AND FINANCIAL AID
Student Admissions
*Admissions Data Input
*Residency Classifications
*Transcript evaluations
*International Student Credentials
*Student File Maintenance
*Special Admissions
Student Financial Aid
*Financial Aid Awards
*Veteran Certification
*Student Loan Certification
*External Award Coordination
*Financial Aid Transcript
Records
*Admissions, Financial Aid and Veterans reports to College, State and Agencies
IA SIS Conversion
Adopt-A-School
Counseling
*Admissions
*Financial Aid/Veterans
*Special Admission
Registration Appointments
RECORDS
Academic Records
*Security and maintenance
*Data input of permanent records
*Readmission Certification
*Processing and mailing
Verification and Certification of Enrollment
*Outside agencies: GSL, OHS, MHA, F.B.I.
*Athletics
Graduation
*Degree plan certification
Registration
*Processing of Fee Cards
*Mail of approved SIF
Counseling
*Transcript Interpertation
Reports
*Class Rolls
*College and External Agencies
Transcripts
*Former and currently enrolled Student
*Authorized external Agencies
STUDENT ORGANIZATIONS AND ACTIVITIES AND ATHLETICS
Government Association
*Elections
*Advisory
Social Discipline
Graduation
*Organization/Implementation
Student Newspaper
*The Insider
Student Organizations
*19 organizations
College-wide Activity Calendar
Inter-Collegiate Athletics
*Game Schedules
*NJCAA and TJCCAA Regulations
*Restricted Budget Control
*Athletics Eligibility
CAREER AND JOB PLACEMENT
Job Placement
*On/off campus
*Students/graduation alumni
College Work Study Program
*Development of on/off work sites
*Monitor/Reconcile CWSP payroll
*Implement Federal Guidelines
*Invoice off-campus employers
*Assign CWSP students
Registration
Counseling
*Personal/Career
Career and College Days
Reporting
*CWSP President's Annual Report
*Graduate Performance Funding
*CWSP Annual Fiscal Report
Recruitment
*Media Presentations
*Employees of Business/Industry
*Publications
*Authorized external Agencies
CENTER FOR COUNSELING AND ADVISING
Counseling
*Career
*Personal
*Academic
*Withdrawal
Late Registration
Drop/Add
Testing
- AAPP, ACT, ACT COMP
*Administration
*Site Development
*Scoring
*Scheduling
Recruitment



Function	Lead Unit
Research - Needs	IA
Marketing/Public Info.	IA
Recruitment	SA
Admissions	SA
Scheduling	AA
Orientation	AA
Registration	SA
Fee Collection	BA
Running Classes	AA
Student Activities	SA
Counseling	SA/MA
Academic Advising	AA
CO-OP/Internships	AA
Security	BA
Safety	BA
Placement	SA
Follow-Up	PP, SA, IA

Institutional Advancement

IR	Institutional Research
DO	Development Office
M	Marketing
PR	Public Relations
CLR	Community and Legislative Relations
EDI	Entrepreneurial Development Institute
MCHS	Middle College High School

Student Affairs

AFA	Admissions and Financial Aid
R	Records
SOAA	Student Organizations and Activities and Athletics
CJP	Career and Job Placement
CCA	Center for Counseling and Advising

Academic Affairs

ADS	Academic and Developmental Services
GTS	General and Transfer Studies
CS	Career Studies
CES	Community Education Services
LR	Learning Resources

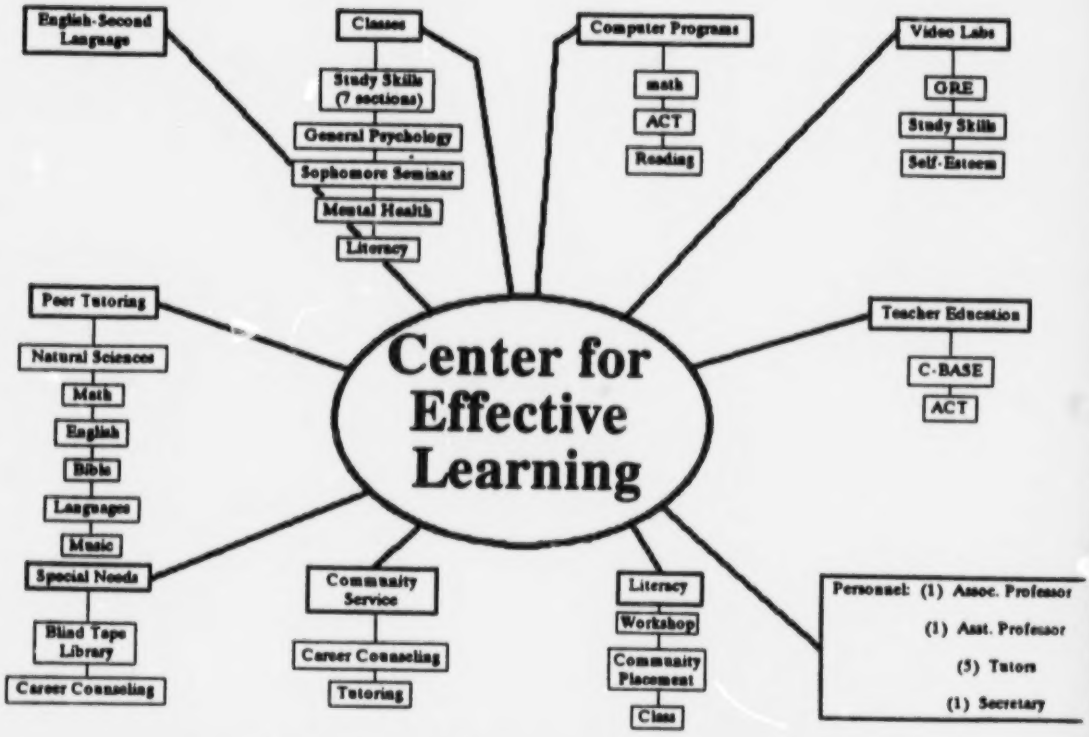
Business Office

CC	Computer Center
P	Personnel
BS	Book Store
BS	Business Services
PP	Physical Plant
A	Accounting

LEARNING EFFECTIVENESS

CENTER FOR DEVELOPMENT

- CURRICULUM
- FACULTY
- INSTRUCTIONAL
- TECHNOLOGY



1992, Fall

Organizational Flow Chart of Current and Projected Responsibilites and Personnel of the Center for Effective Learning

BEST COPY AVAILABLE

Mathematics

To order *Curriculum and Evaluation Standards for School Mathematics*

The National Council of Teachers of Mathematics
Order Processing
1906 Association Drive
Reston, VA 22091

Item number: 398E1, ISBN 0-87353-273-2

Cost: $25 each (discounts for bulk orders)

Science

National Academy of Sciences
National Research Council
2101 Constitution Avenue, NW
Washington, DC 20418

Contact: Ken Hoffman

Completion: summer 1994

History

National Center for History in the Schools
at UCLA
231 Moore Hall, 405 Hilgard Avenue
Los Angeles, CA 90024

Contact: Charlotte Crabtree

Completion: spring 1994

Arts

Music Educators National Conference
1902 Association Drive
Reston, VA 22091

In coordination with the American Alliance for Theatre and Education, the National Art Education Association, and the National Dance Association

Contact: John Mahlmann

Completion: summer 1994

Civics

Center for Civic Education
5146 Douglas Fir Road
Calabasas, CA 91302

Contact: Charles Quigley

Completion: summer 1994

Geography

National Council of Geographic Education

In coordination with the Association of American Geographers, the National Geographic Society, and the American Geographical Society

Contact: Anthony de Souza
Geography Standards Project
1600 M Street, NW
Washington, DC 20036

Completion: winter 1993

English

The Center for the Study of Reading
174 Children's Research Center
51 Gerty Drive
Champaign, IL 61820

In coordination with the National Council of Teachers of English and the International Reading Association

Contact: Jean Osborn

Completion: fall 1995

AMERICAN SOCIETY FOR TRAINING AND DEVELOPMENT (ASTD)

HUMAN RESOURCE DEVELOPMENT (HRD) PROFESSIONAL COMPETENCIES
(35 key areas of knowledge and skill in HRD work)

Technical Competencies

Adult Learning Understanding
Career Development Theories and Techniques Understanding
Job Competency Identification Skill
Computer Competence
Electronic Systems Skill
Facilities (logistics) Skill
Objectives Preparation Skill
Performance Observation Skill
Subject Matter Understanding
Training & Development Theories & Techniques Understanding
Research Skill

Business Competencies

Business Understanding
Cost-benefit Analysis Skill
Delegation Skill
Industry Understanding
Organization Behavior Understanding
Organization Development Theories & Techniques Understanding
Organization Understanding
Project Management Skill
Records Management Skill

Interpersonal Competencies

Coaching Skill
Feedback Skill
Group Process Skill
Negotiation Skill
Presentation Skill
Questioning Skill
Relationship Building Skill
Writing Skill

Intellectual Competencies

Data Reduction Skill
Intellectual Versatility
Observing Skill
Information Search Skill
Model Building Skill
Visioning Skill

Self-knowledge

INSTITUTIONAL EFFECTIVENESS "MUST" STATEMENTS

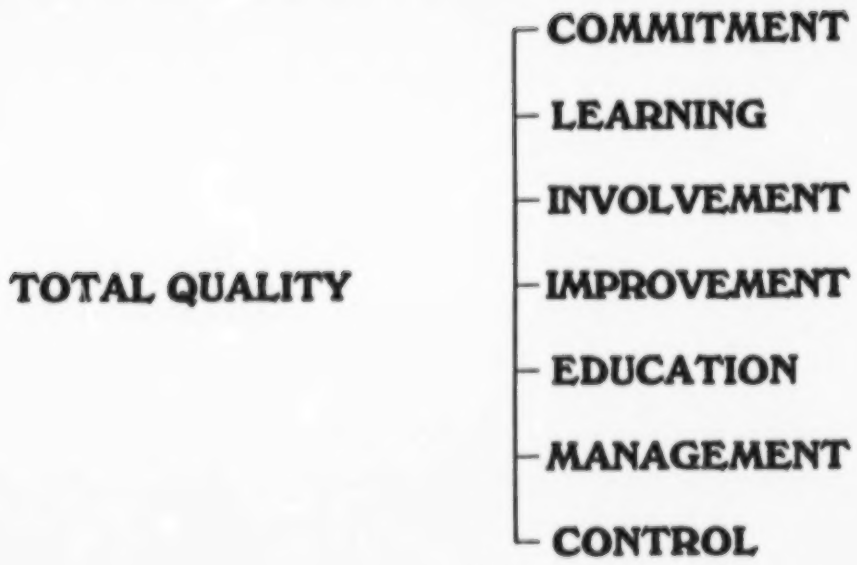
1. The institution must establish adequate procedures for planning and evaluation.
2. The institution must define its expected educational results and describe how the achievements of these results will be ascertained.
3. Institutions with research or public service missions must develop and implement appropriate procedures for evaluating their effectiveness in these areas.
4. All institutions must engage in continuous study, analysis and appraisal of their purposes, policies, procedures and programs.
5. Institutions regularly must evaluate their institutional research function.

Criteria For Accreditation, Commission on Colleges, Atlanta, GA: Southern Association of Colleges and Schools, 1987. Pages 10 and 11.

STATEMENTS WHICH SUGGEST WHAT AN EFFECTIVE PLANNING AND EVALUATION PROCESS SHOULD INCLUDE

1. broad-based involvement of faculty and administration;
2. the establishment of a clearly defined purpose appropriate to collegiate education;
3. the formulation of educational goals consistent with the institution's purpose;
4. the development of procedures for evaluating the extent to which these educational goals are being achieved; and
5. the use of the results of these evaluations to improve institutional effectiveness.

Criteria For Accreditation, Commission on Colleges. Atlanta, GA: Southern Association of Colleges and Schools, 1987. Page 10.



TOTAL QUALITY COMMITMENT

CONTINUOUS IMPROVEMENT OF QUALITY

CENTRAL FOCUS ON THE CONSUMER

SYSTEMATIC IMPROVEMENT OF OPERATIONS

OPEN WORK ENVIRONMENTS - ATMOSPHERE

LONG-TERM THINKING

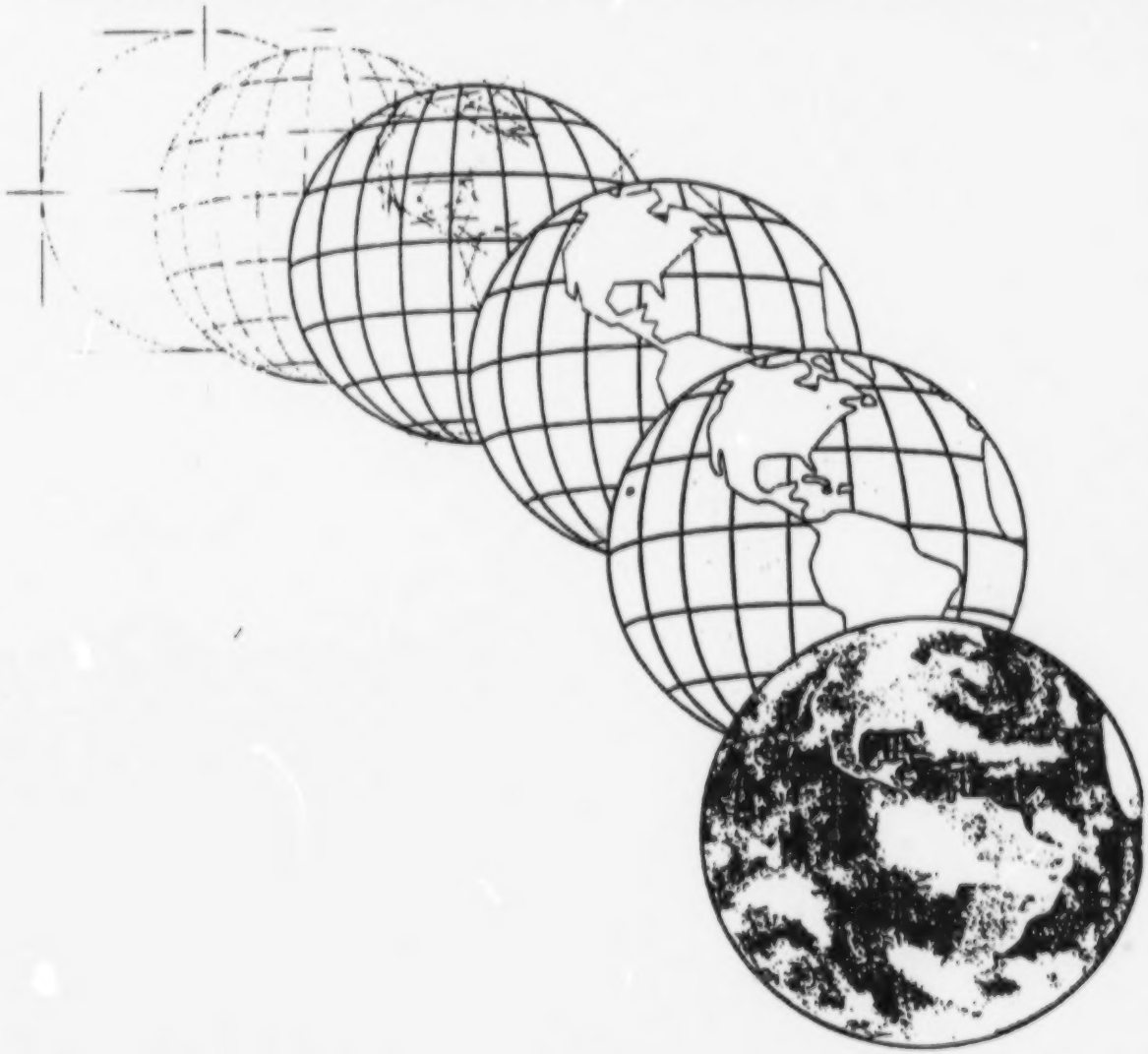
HUMAN RESOURCES DEVELOPMENT

COORDINATION AND LEADERSHIP

Robbie Lee Needham. "Total Quality Management: An Overview." Leadership Abstracts. Laguna Hills, CA: League of Innovation, Vol. 4, no. 10, July 1991.

A BLUEPRINT FOR GOING GLOBAL

ALIGNING YOUR STRATEGY WITH RESOURCES



POPULATION PROJECTIONS BY WORLD REGION
(in millions)

	1990	1995	2000	2025
World, Total	5,248.5	5,679.3	6,127.1	8,177.1
More developed	1,208.8	1,242.8	1,275.7	1,396.7
Less developed	4,039.7	4,436.4	4,851.5	6,780.4
South Asia	1,740.2	1,909.4	2,073.7	2,770.6
East South Asia	440.4	480.8	519.7	684.7
Middle South Asia	1,169.9	1,279.9	1,385.7	1,815.9
West South Asia	129.9	148.7	168.3	270.0
East Asia	1,317.2	1,390.4	1,460.0	1,696.1
Africa	645.3	753.2	877.4	1,642.9
Europe	499.5	506.5	513.1	526.9
East Europe	115.7	118.2	121.0	131.2
North Europe	82.6	83.0	83.4	83.6
South Europe	146.4	150.0	153.1	162.8
West Europe	154.8	155.3	155.6	149.3
Latin America	453.2	501.3	550.0	786.6
Caribbean	34.6	37.7	40.8	57.7
Middle America	119.7	134.4	149.6	222.6
Temperate South America	49.1	52.3	55.5	70.1
Tropical South America	249.8	276.9	304.1	436.3
Soviet Union	291.3	303.1	314.8	367.1
North America	275.2	286.8	297.7	347.3
Canada	27.1	28.3	29.4	34.4
United States	248.0	258.3	268.1	312.7
Oceania	26.7	28.5	30.4	39.5

World Almanac and Book of Facts. NY: Pharos Books. 1989. P. 737.

IMPORTANT ELEMENTS IN UNDERSTANDING OTHER COUNTRIES

LANGUAGE

Spoken language
Written language
Official language
Linguistic pluralism
Language hierarchy
International languages
Mass media

POLITICS

Nationalism
Sovereignty
Imperialism
Power
National interests
Ideologies
Political risk

VALUES AND ATTITUDES

Toward time
- achievement
- work
- wealth
- change
- scientific method
- risk taking

LAW

Common law
Code law
Foreign law
Home country law
Anti-trust policy
International law
Regulation

EDUCATION

Formal education
Vocational training
Primary education
Secondary education
Higher education
Litarery level
Human resources Development

RELIGION

Sacred Objects
Philosophical system
Beliefs and norms
Prayer
Taboos
Holidays
Rituals

TECHNOLOGY AND MATERIAL CULTURE

Transportation
Energy systems
Tools and objects
Communications
Urbanization
Science
Invention

SOCIAL ORGANIZATION

Kinship
Social institutions
Authority structures
Interest groups
Social mobility
Sexual stratification
Status systems

WHAT IS CONTAINED IN ISO 9001, 9002 and 9003

M. Breitenberg - 5/92

The chart below shows and compares the elements contained in ISO 9001, 9002, and 9003:

Requirement	ISO 9001	ISO 9002	ISO 9003
Management Responsibility	X	X*	X**
Quality System	X	X	X**
Contract Review	X	X	
Design Control	X		
Document Control	X	X	X**
Purchasing	X	X	
Purchaser Supplied Product	X	X	
Product Identification & Traceability	X	X	X**
Process Control	X	X	
Inspection & Testing	X	X	X**
Inspection, Measuring & Test Equipment	X	X	X**
Inspection & Test Status	X	X	X**
Control of Nonconforming Product	X	X	X**
Corrective Action	X	X	
Handling, Storage, Packaging & Delivery	X	X	X**
Quality Records	X	X	X**
Internal Quality Audits	X	X*	
Training	X	X*	X**
Servicing	X		
Statistical Techniques	X	X	X**

* Requirements are less stringent than those in ISO 9001.
** Requirements are less stringent than those in ISO 9002.

WHERE CAN COPIES OF THESE STANDARDS BE OBTAINED?

Copies of ISO draft/final standards can be purchased from: The American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036, Phone: (212) 642-4900, Fax: (212) 302-1286.

WHERE CAN INFORMATION ON THE WORK OF ISO TC 176 BE OBTAINED?

Information on ISO Technical Committee 176 (the committee responsible for the development of the ISO 9000 and 10000 series standards) can be obtained from Patricia Kopp, Standards Administrator, the American Society for Quality Control (ASQC), 611 East Wisconsin Ave., Milwaukee, WI 53202, Phone: 414-272-8575.

Appendix C

Planning Preferences

This information has been used over the past years to better understand scenario and action plan development. The first two sheets are a framework for understanding differences in planning preferences as described in the Myers-Briggs Type Indicator (MBTI) and modified by Gary Gappert, Director of the Futures Center at the University of Akron. The Gappart test classifies individuals by four preferences: Strategic Humanist (SH), Strategic Planner (SP), Pragmatic Humanist (PH) and Pragmatic Manager (PM). Other tests which are helpful include the Kolb Learning Styles Inventory (LSI), the Torrence Hemisphericity test, and the Hersey Blanchard Lead test.

The Gappart planning preferences test had been used quite frequently to group participants to accomplish tasks. The next several pages contain information about change in planning preference of professionals over the three years in the Child and Youth Studies (CYS), planning preferences of professionals who are enrolled in the four CYS multi-tech clusters and CYS clusters, and the planning preferences of professionals in two clusters in the Programs for Higher Education.

The next page lists the categories of visions and alternative scenarios that were used in the late 1970s and throughout the 1980s. Some of this background is contained in Perspectives on the Education and Training System of the Future (The Ohio State University, 1986) and in The Learning Community of the Future: Education and Training in the 21st Century (ED 280 538, 1987). Another sheet contains the macro global scenarios and recommendations contained in Workforce 2000 (1987).

The next page is a list of aternative education models presented at a workshop for the Department of Education in Little Rock, Arkansas, in 1989. That is followed by a visual of restructured early childhood learning environments and for "choices" for acquiring what is now secondary school competencies and skills: contemporary traditional education, partial technological deschooling, collaborative lifelong learning, and solution based learning. Other education and training would continue -- home bound instruction and corporate education and training. Another sheet describes how the models could unfold in the 1990s. The National School Board Association (1990) helped to focus on visionary leadership in the agenda for the 1990s: restructuring, early childhood education, technology, vocational education, and the raising of professional standards of personnel.

Scenarios were developed at several institutions by matching planning preferences and tasks as follows:

Pragmatic Managers	Contemporary Traditional Education
Pragmatic Humanist	Collaborative Lifelong Learning
Strategic Planners	Partial Technological Deschooling
Strategic Humanist	Solution Based Learning

The next several sheets represent large scale visioning and action plan projects. The Nebraska Community College Association initiated a strategic planning process in 1991 that yielded 8 areas of emphasis. The Mid-Plains Community College Area initiated a strategic planning process in 1992 that involved 100+ participants and yielded 8 scenarios with multi-year action plans: General Education Core; Remedial and Developmental Education; Vocational- Technical Education On-Site and Mobile; Remedial and Developmental Education via Distant Delivery into Community, Home, and Workplace; Next Generation Tech-Prep Programs; Rural Community Leadership and Social Infrastructure Development; Lifelong Consumer Controlled Learning for Adult Literacy; and Solution Based Outcomes Learning.

The Southwestern Allied Health Sciences School held a strategic planning retreat in 1992 that yielded 9 strategic directions which were refined into specific actions for 4 categories in a plan: mission attainment, functional relationships, qualitative improvements, and human resources development. Tasks matched with planning preferences were as follows:

Mission Attainment	Strategic Humanists
Functional Relationships	Pragmatic Managers
Qualitative Improvements	Strategic Planners
Human Resources Development	Pragmatic Humanists

Restructuring projects are supported by the Casey and R.J. Nabisco Foundations, American 2000 and the Office of Educational Research and Improvement, Catholic Schools for the 21st Century, the Edison Project, and state projects such as Florida 2000. In addition, the New American Schools Development Corp. funded 11 projects in the summer of 1993. The Community Learning Centers project has been used in three CYS seminars to help professionals apply their research to visions creation. Planning preferences matched with tasks were as follows:

Strategic Humanists	People Oriented, Brain Based Learning
Strategic Planners	Technology, Graphics, Printing
Pragmatic Humanists	Progressive Curriculum
Pragmatic Managers	World As The Campus

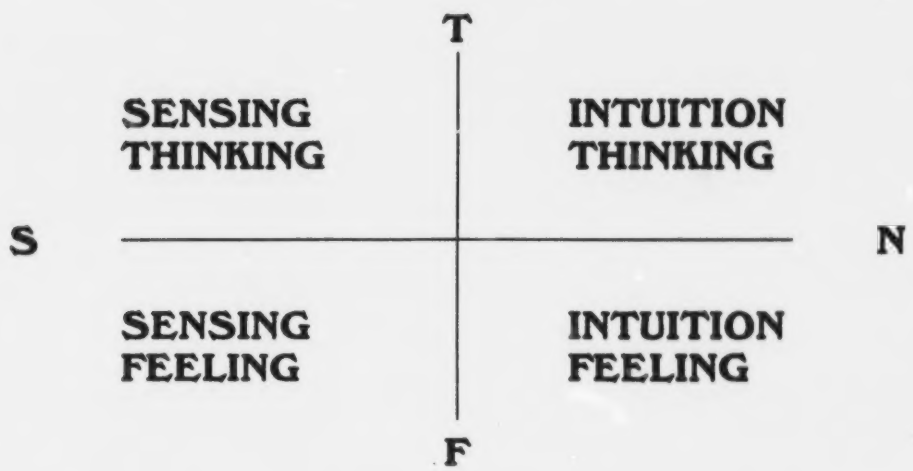
Ultimately, education, work, and society could be integrated through solution based learning communities that build on improved cognitive synapses and electronic networks focused on critical industries like graphic arts-printing.

HUMAN

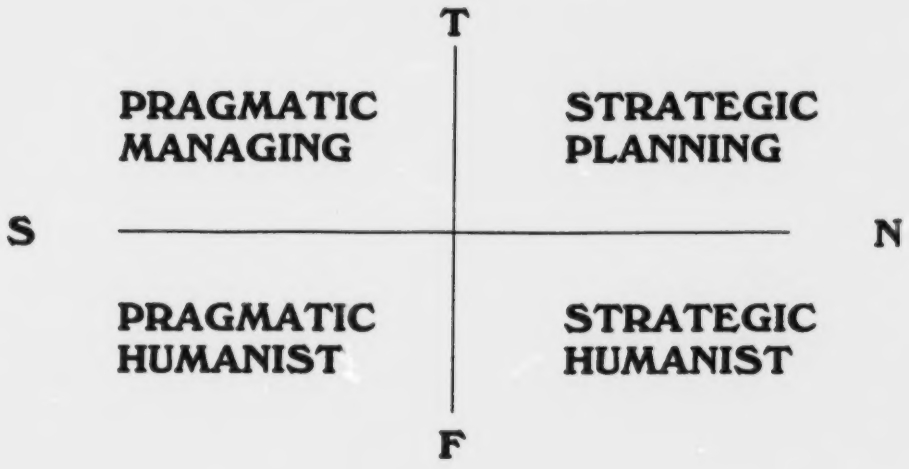
RESOURCE

DEVELOPMENT

MYERS-BRIGGS TYPES

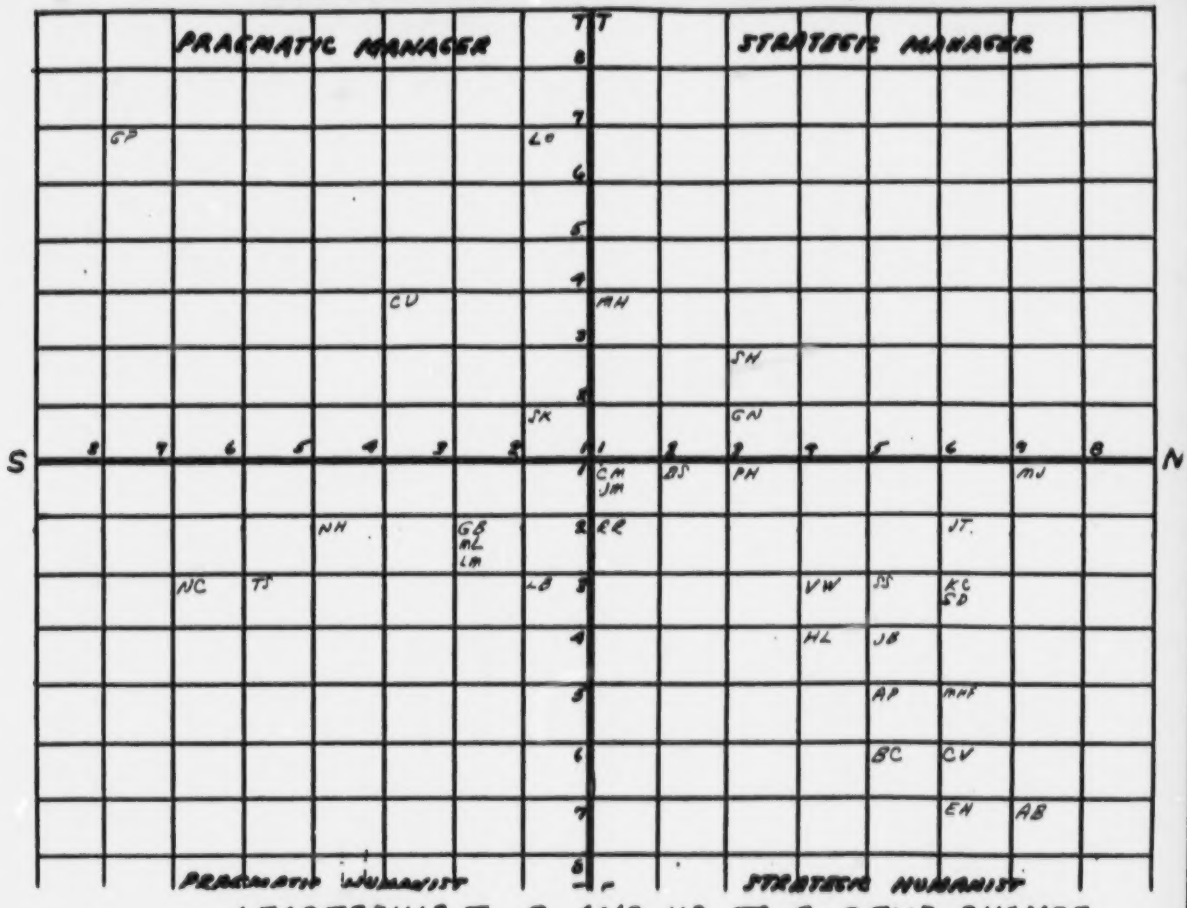


GAPPERT PLANNING STYLES

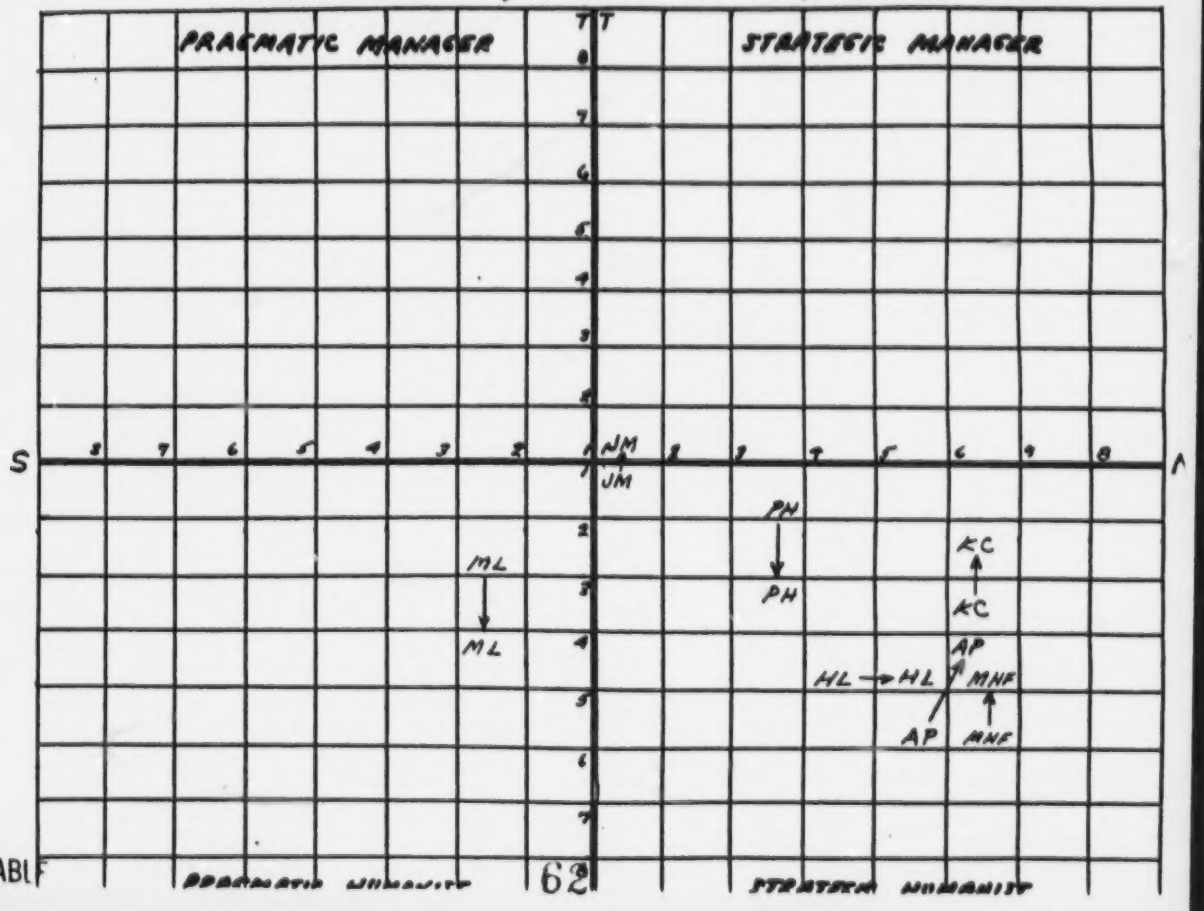


EASTERN AND WESTERN THOUGHT

LEADERSHIP I, CLUSTER 3, 1101



LEADERSHIP II, 0 AND UP TO 2 CELLS CHANGE



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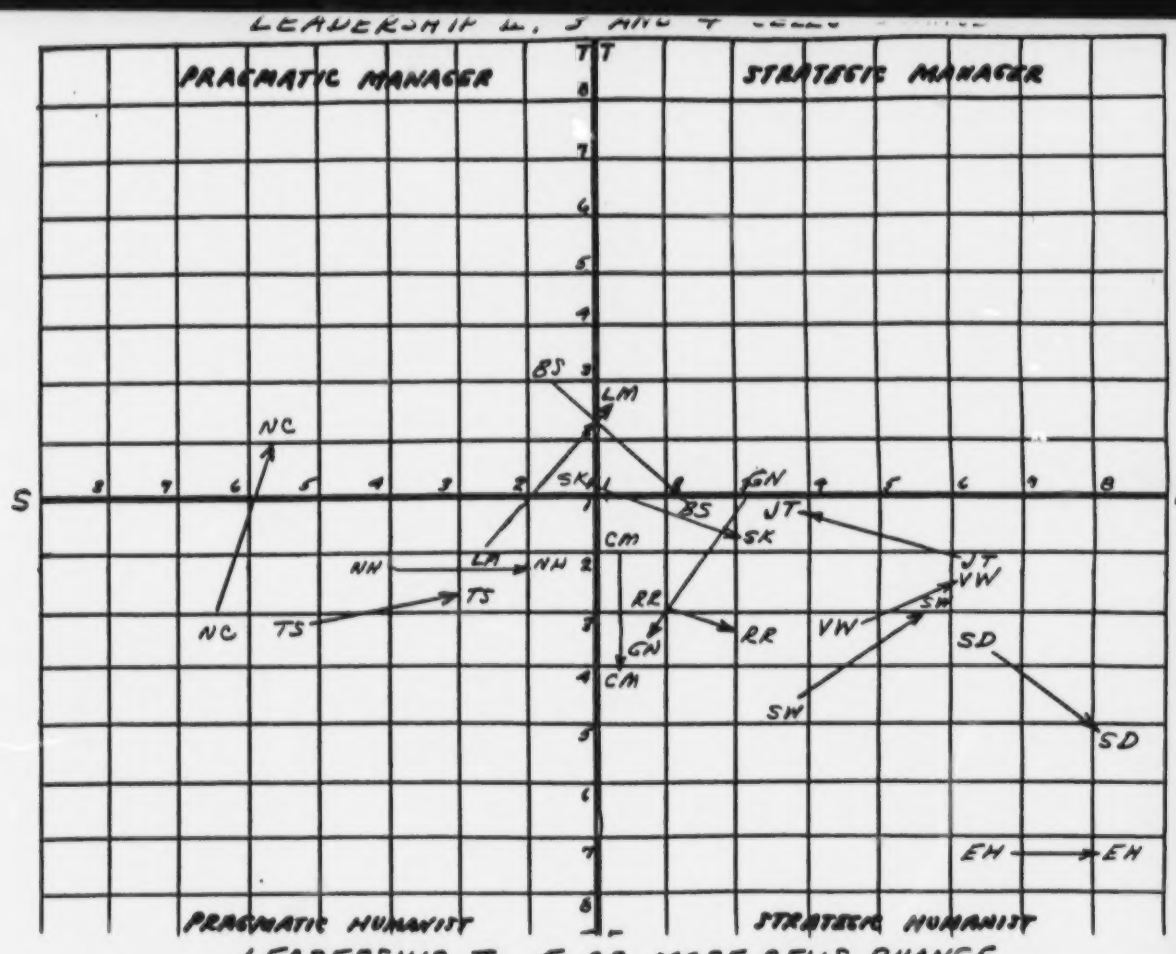
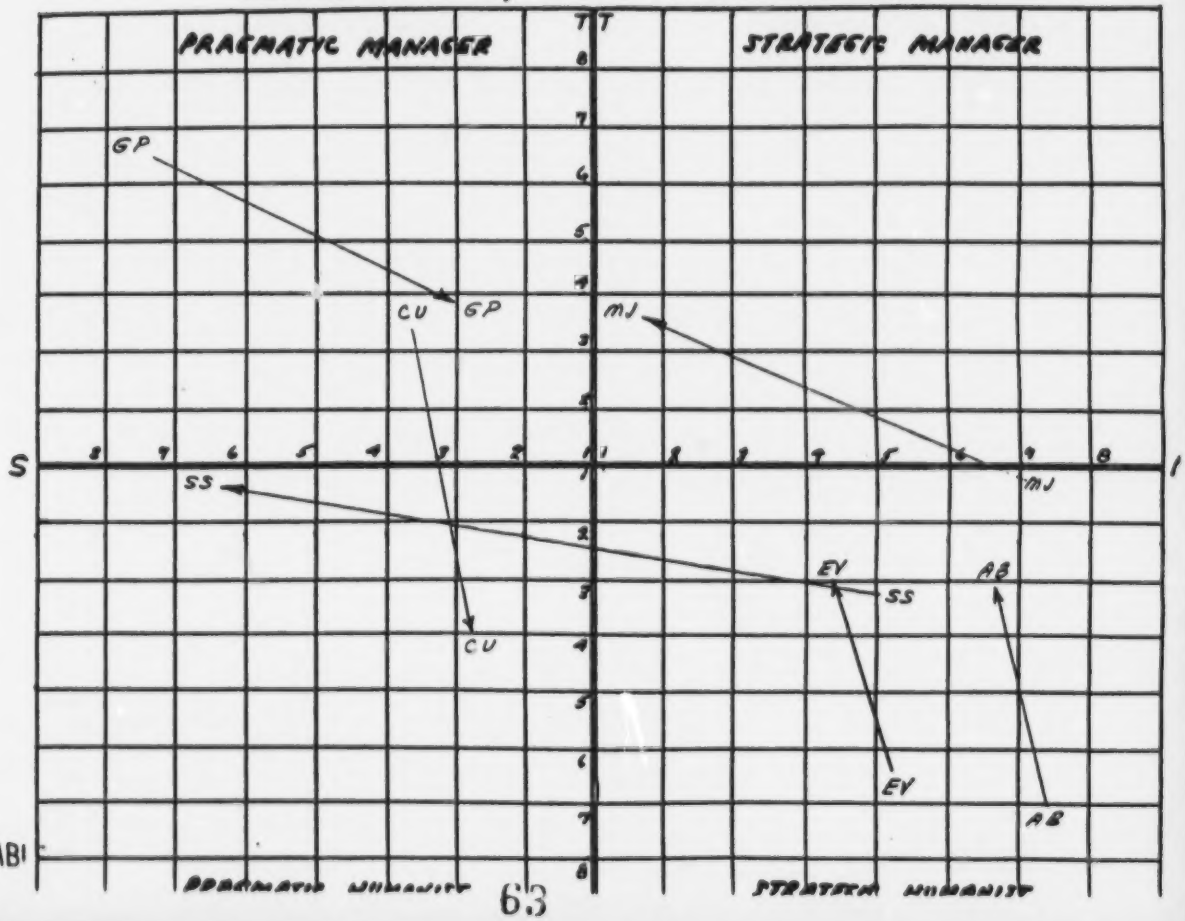


LEADERSHIP II, 5 OR MORE CELLS CHANGE



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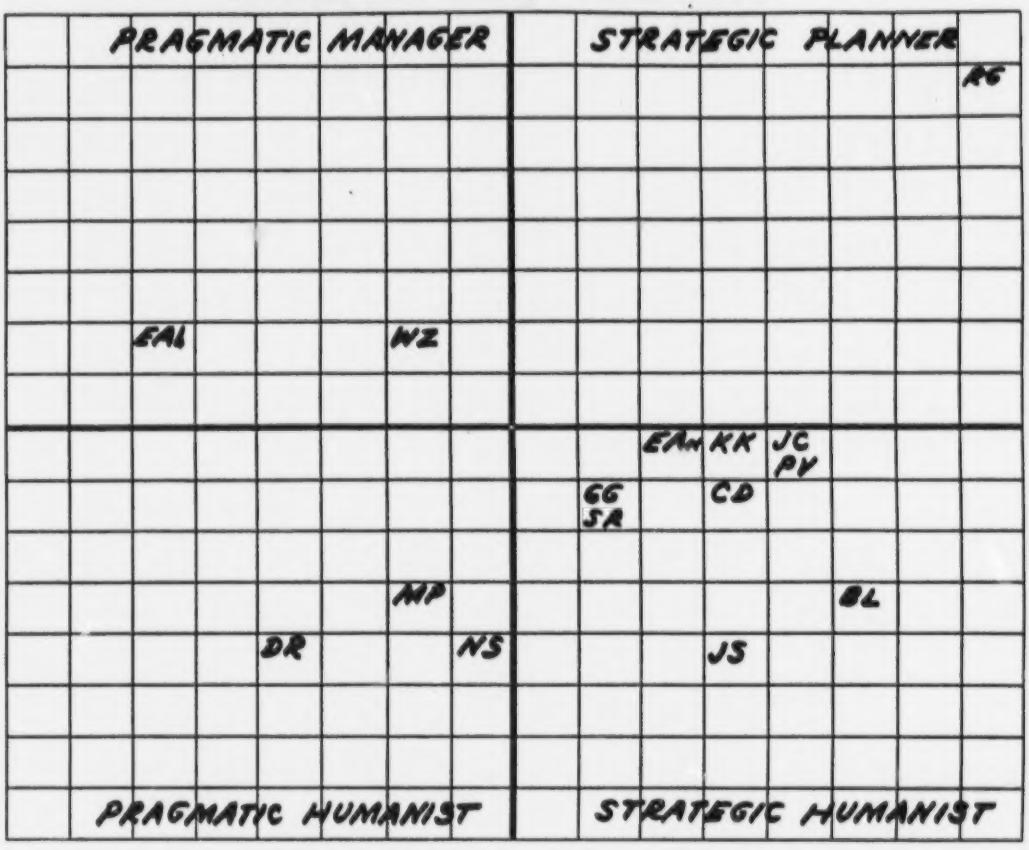
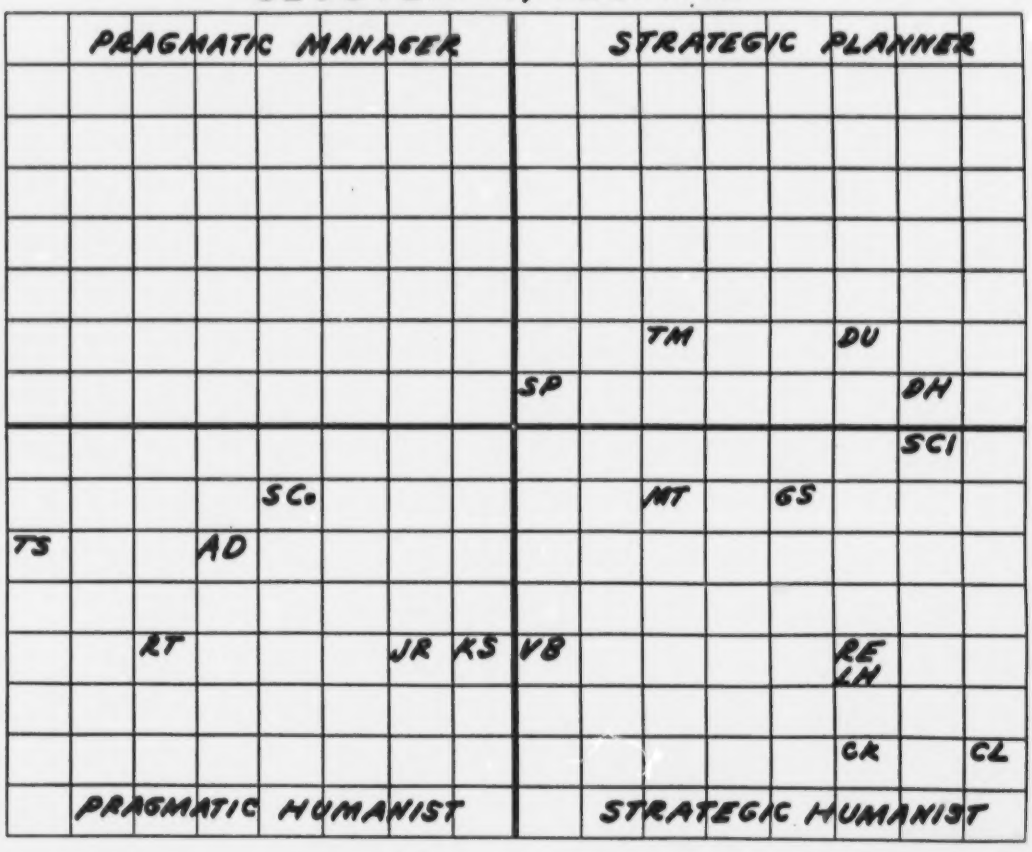
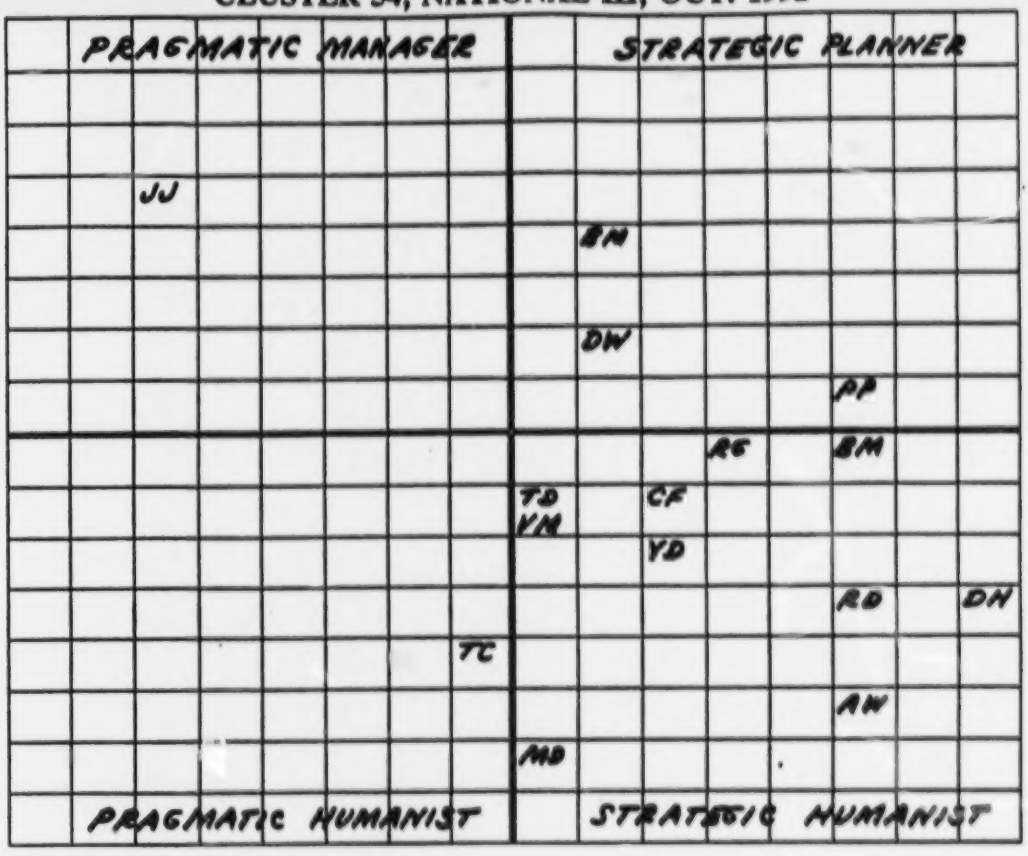
CLUSTER 46, FEB. 1991



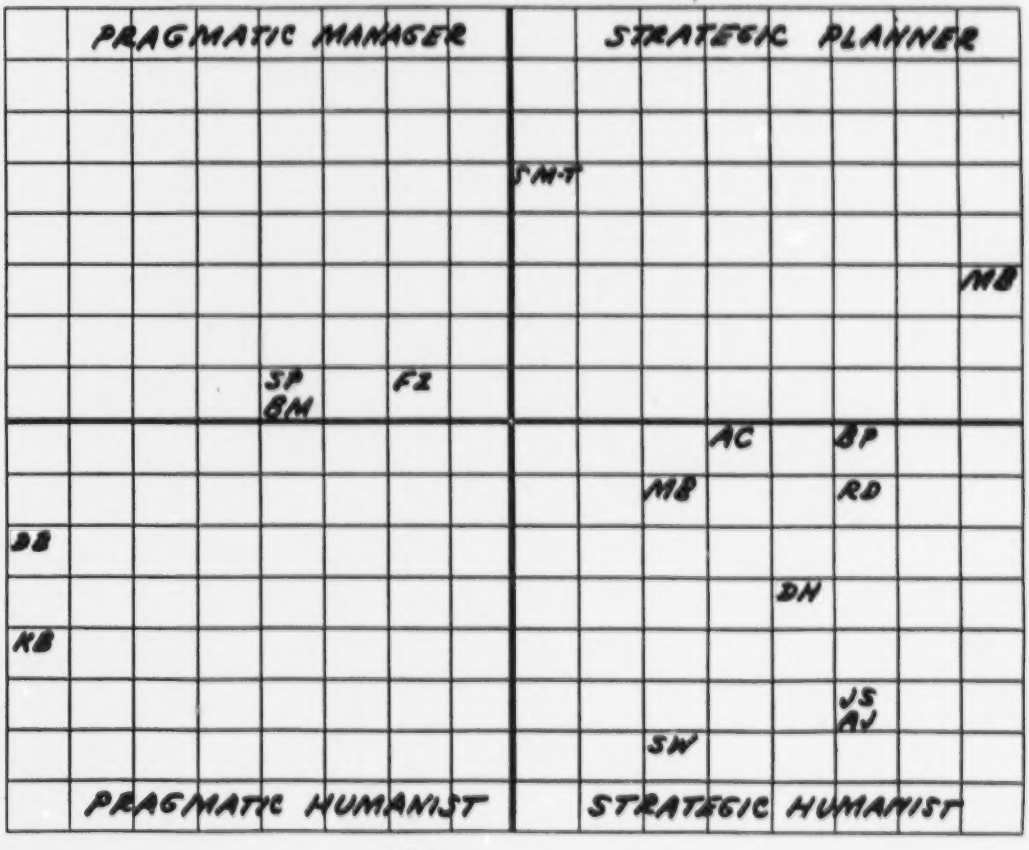
CLUSTER 50, FEB. 1992



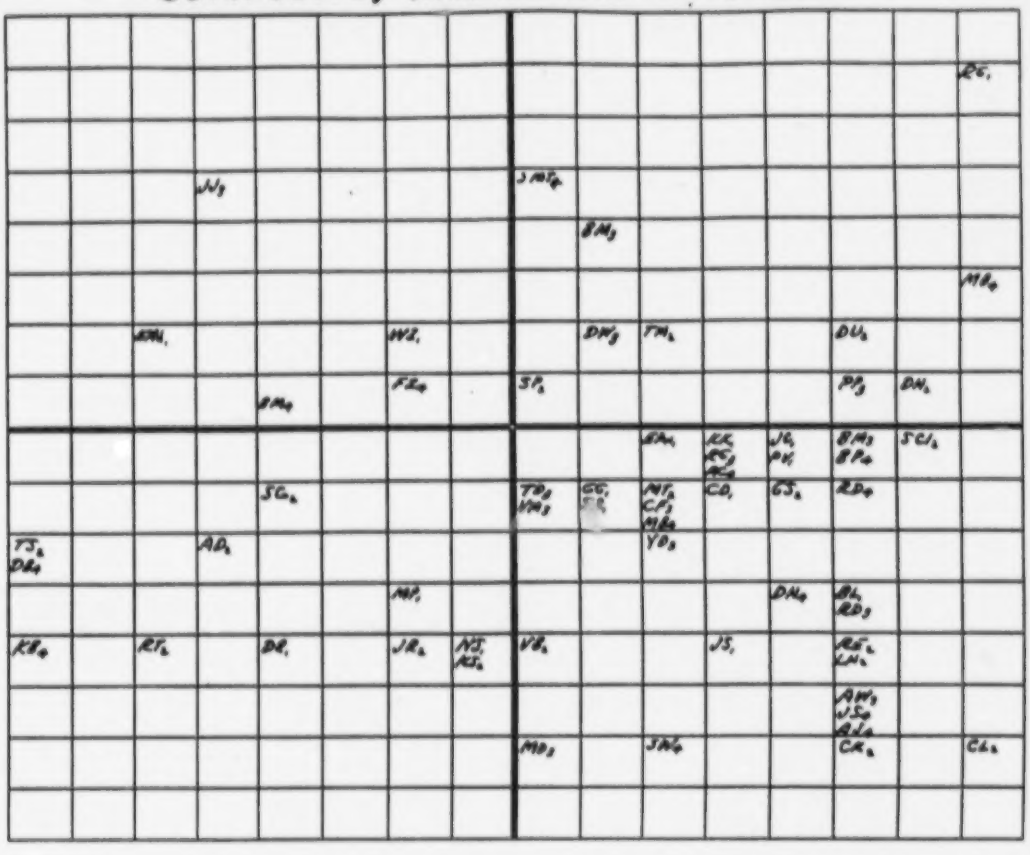
CLUSTER 54, NATIONAL III, OCT. 1992



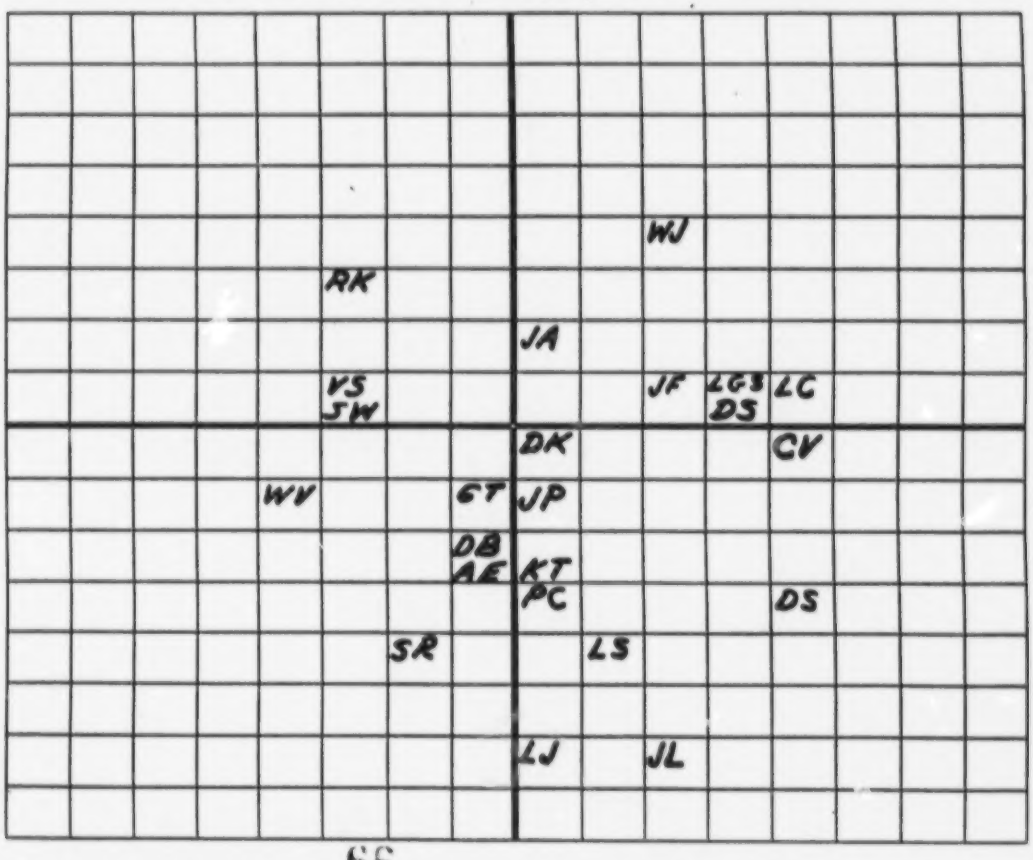
CLUSTER 59, FEB. 1993



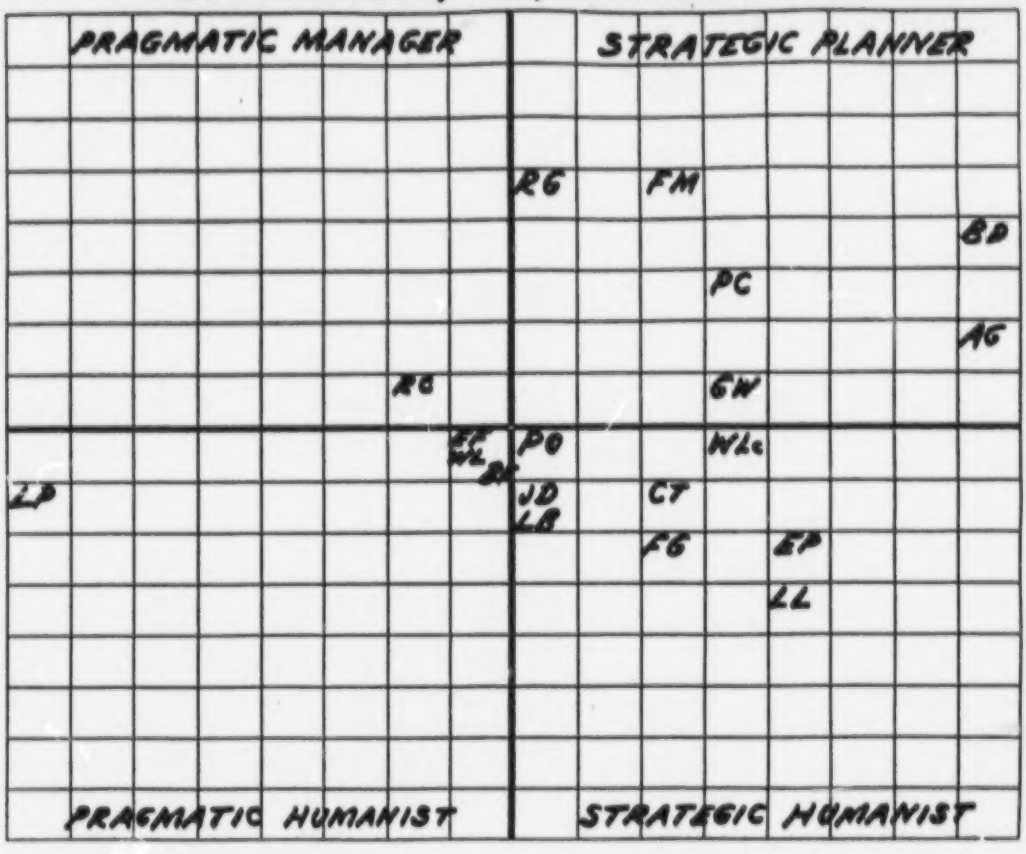
COMPOSITE, MULTI-TECH CLUSTERS



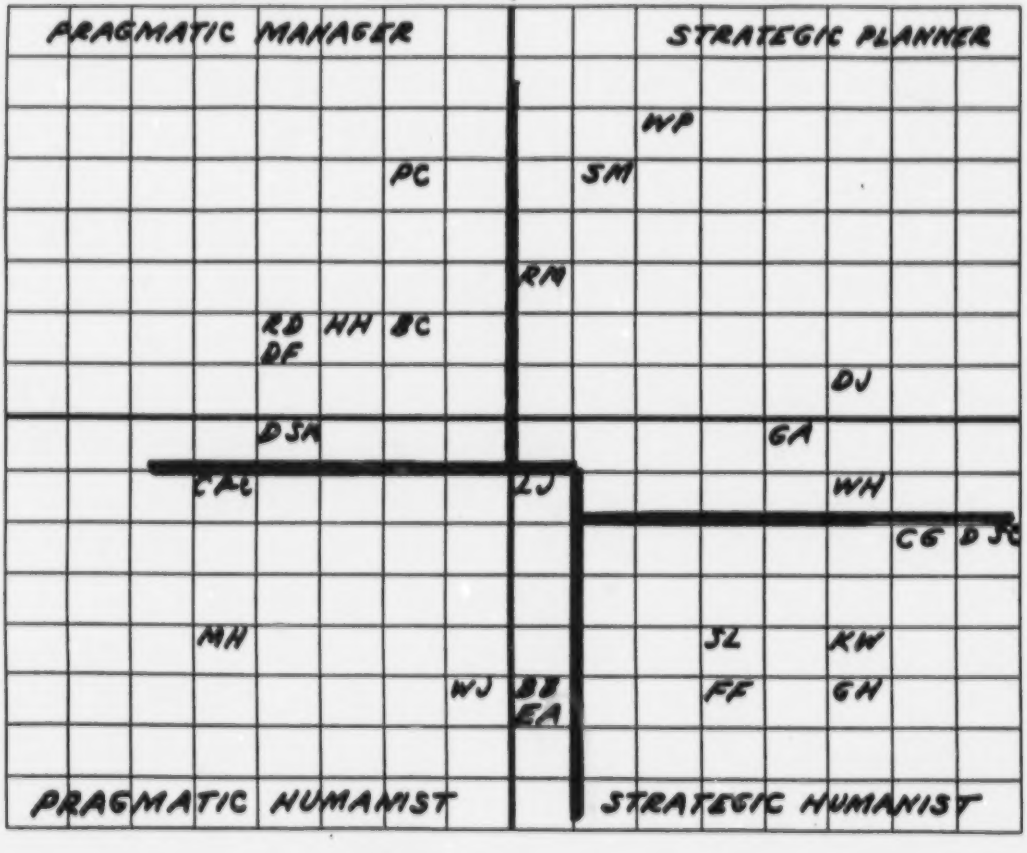
KING OF PRUSSIA, PA 1-17-93



SPRINGFIELD, MO., WINTER 1993



WEST FLORIDA, SPRING 1993



CREATING VISIONS

AND

ALTERNATIVE SCENARIOS

OPTION 1

Expansion

Steady State

Contraction

OPTION 2

Contemporary Traditional

Partial Technological

Technology Intensive

OPTION 3

Contemporary Traditional

Partial Technological - Technology Intensive

Cooperative Lifelong Learning

Solution Based Learning

SCENARIOS

SURPRISE - FREE

WORLD DEFLATION

TECHNOLOGY BOOM

WORKFORCE 2000

WORKFORCE 2000: WORK AND WORKERS FOR THE TWENTY-FIRST CENTURY

1. STIMULATING WORLD GROWTH.
2. IMPROVING PRODUCTIVITY IN SERVICE INDUSTRIES.
3. IMPROVING THE DYNAMISM OF A WORKFORCE.
4. RECONCILING THE NEEDS OF WOMEN. WORK, AND FAMILIES.
5. INTEGRATING BLACKS AND HISPANICS FULLY INTO THE WORKFORCE.
6. IMPROVING WORKERS' EDUCATION AND SKILLS.

B. Johnston and A.E. Packer.
Workforce 2000: Work and Workers for the 21st Century.
Indianapolis, IN: Hudson Institute, 1987.

ALTERNATIVE EDUCATION

1. Contemporary Traditional Education (CTE) Models

    a. Within a CTE Classroom
    b. Within a CTE School
    c. Within a Single Subject - Math, Science, Humanities
    d. Between Subjects - Math and Science, English, and Social Sciences
    e. Between Tracks - Academic and Vocational
    f. Between Schools Within a District - Level, Magnet Schools
    g. Between Districts - "Choice"
    h. Within a State - North Carolina School of Arts
    i. Special Focus - "At-Risk", Drop Out Prevention, Disciplines, Articulated, Differentiated/Developmental Curriculum, Learning Styles, Pregnant Females, Substance Abusers, Cultural Diversity, Substance Abuse, Personal Abuse
    j. Between Layers - Middle College High School

2. Partial Technological Deschooling (PTD) Models

    a. Distant Learning Systems
    b. Apple Classrooms of Tomorrow - Elementary Level
    c. IBM's School of the Future - Secondary Level
    d. The Education Utility

3. Collaborative Lifelong Learning (CLL) Models

    a. Cooperative Education
    b. Clinical Affiliations
    C. Compacts - Academic Credit for Public Service
    d. Partnerships

4. Solution Based Learning (PBL) Models

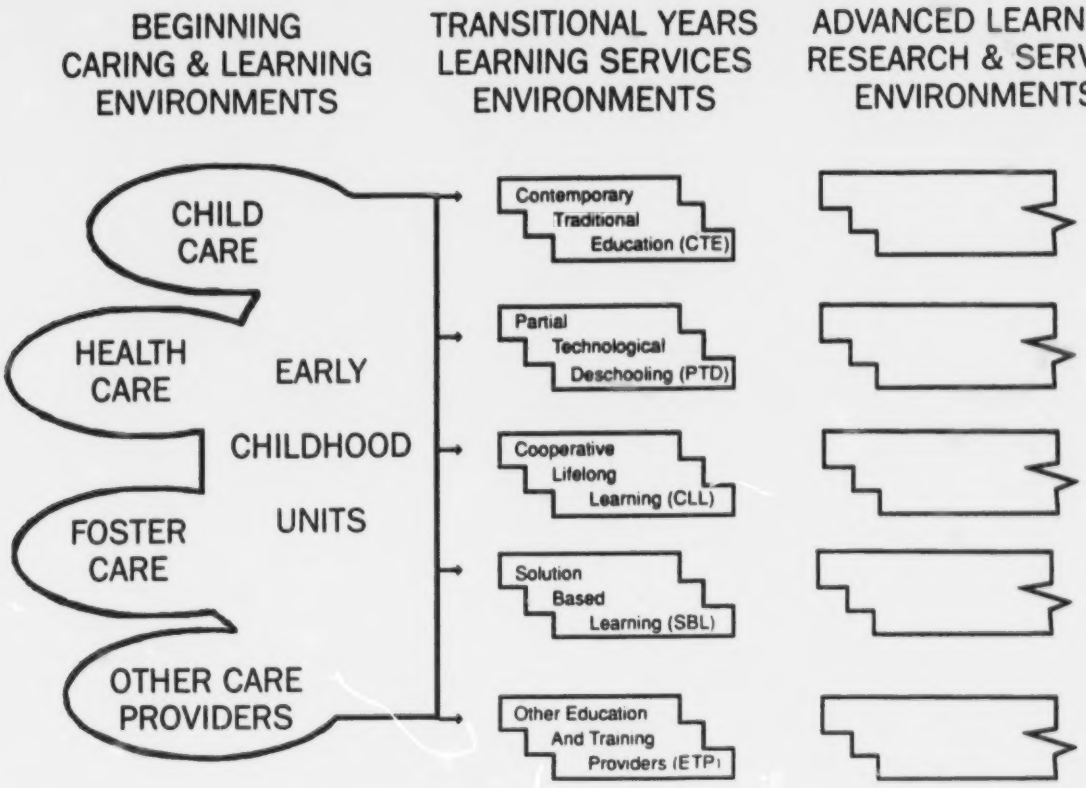
5. Other Education and Training Provider (ETP) Models

    a. Nontraditional Private Providers
    b. Corporate Sponsored Providers
    c. Home Based Instruction, Correspondence

6. Role of Support Units

    a. Library and Instructional Materials
    b. Instructional Development and Media
    c. Student Assessment, Counseling, Diagnostic Services
    d. Administration
    e. Boards-Advisory, Committees, Directors, Foundations, Trustees

INFO ERA LEARNING COMMUNITIES OF THE FUTURE



TOWARD LEARNING COMMUNITIES OF THE FUTURE

EARLY 1990s **MID 1990s**

Conditions of Society

Trend Analysis

&

Extrapolation

⇒

Conceptual Frameworks

1. **CTE**
2. **PTD**
3. **CLL**
4. **SBL**

⇒

Design

&

Experiment Phase

BOARDSMANSHIP TRANSFORMATION

INDUSTRIAL ERA	TECHNICAL ERA
BLACK BOARD	KEY BOARD

EDUCATION REFORM FOR THE '90s:

THE SCHOOL BOARD AGENDA

RESTRUCTURING SCHOOLS

EARLY CHILDHOOD EDUCATION

TECHNOLOGY

VOCATIONAL EDUCATION

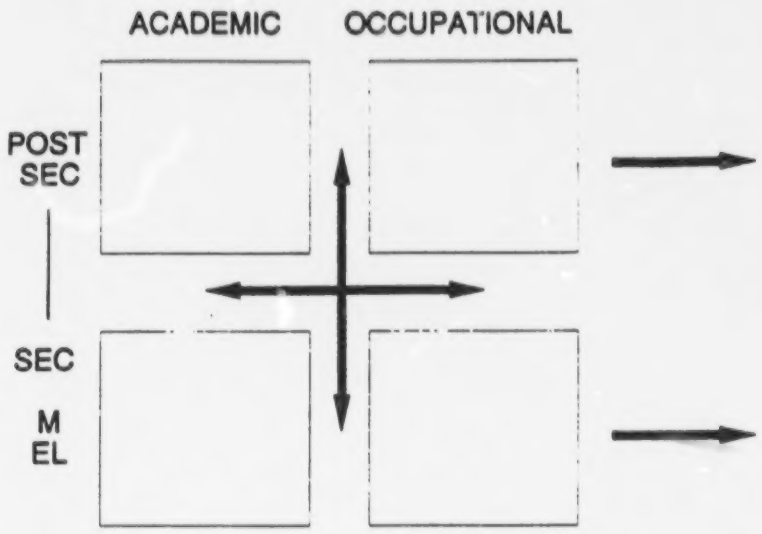
RAISE PROFESSIONAL STANDARDS OF PERSONNEL

NATIONAL SCHOOL BOARDS ASSN.

HEALTH AND HUMAN SERVICES	HEALTH AND HUMAN SERVICES
BUSINESS AND INDUSTRY	BUSINESS AND INDUSTRY
GOVERNMENT AND PUBLIC SERVICE	GOVERNMENT AND PUBLIC SERVICE
EDUCATION AND TRAINING	EDUCATION AND TRAINING

PM GENERAL EDUCATION CORE	SP NEXT GENERATION TECH-PREP PROGRAMS
PH REM & DEV ED VIA TECH ON SITE	SH RURAL COMMUNITY LDRSHIP & SOCIAL INFRASTRUCTURE DEV
PM VOC-TECH ED ON SITE & MOBILE	SP LIFELONG CONSUMER CONTROLLED LEARNING FOR ADULT LITERACY
PH REM & DEV ED DISTANT DELIVERY COMMUNITY, HOME, WORK	SH SOLUTION BASED LEARNING FOR HEALTH CAREERS

EDUCATION WORKPLACES



NEXT GENERATION TECH-PREP PROGRAM

	YEAR 1	YEAR 2	YEAR 3
REFINEMENT 1. AUDIT 2. INTEGRATION 3. "CLINICAL"			
DISSEMINATION 1. TRAINING 2. TECHNICAL ASSISTANCE 3. REPLICATION			
EVALUATION			

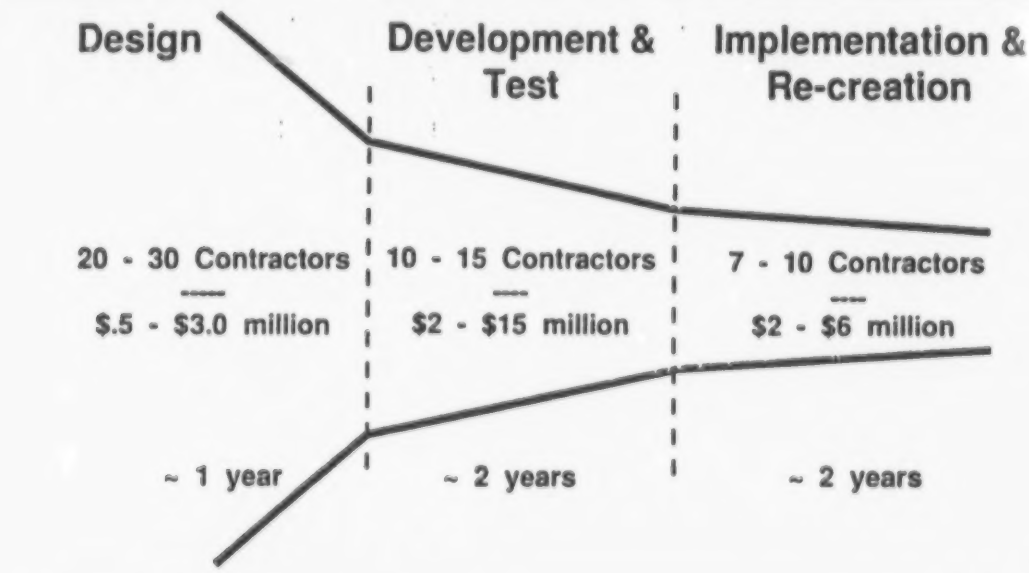
RED	**GREEN**
PRAGMATIC	STRATEGIC
MANAGERS	PLANNERS
FR	QI
YELLOW	**BLUE**
PRAGMATIC	STRATEGIC
HUMANISTS	HUMANISTS
HRD	MA

RETHINKING, RESTRUCTURING, & REVITALIZING

	YEAR 1 UNDERSTANDING	YEAR 2 COMMITMENT	YEAR 3 DEDICATION
MISSION ATTAINMENT			
FUNCTIONAL RELATIONSHIPS			
QUALITATIVE IMPROVEMENTS			
HUMAN RESOURCES DEVELOPMENT			

NEW AMERICAN SCHOOLS DEVELOPMENT CORPORATION

Proposed Phased Selection



New American Schools Development Corporation

CHALLENGE

Assume that the schools we have inherited did not exist, and design an educational environment to bring every child in this community up to world class standards in English, mathematics, science, history, and geography, prepared for responsible citizenship, further learning, and productive employment. No question about schooling should be off-limits; no answer assumed.

---

[1] **Designs for a New Generation of American Schools: A request for Proposals, New American Schools Development Corporation, October, 1991, p.9.**

ATLAS Communities
The Odyssey
Roots and Wings
The National Alliance For Restructuring Education
The Bensenville Community Design
The College for Human Services
Community Learning Centers
The Co-NECT School
Expeditionary Learning
The Los Angeles Learning Centers
The Modern Red Schoolhouse

COMMUNITY

LEARNING

CENTERS

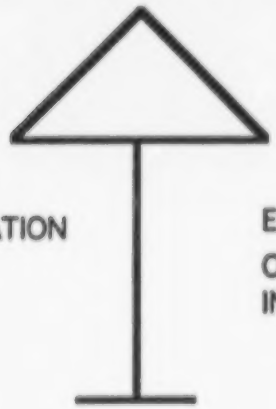
COMMUNITY LEARNING CENTERS

1. Headquarters for learning.
2. Brain based learning.
3. Progessive curriculum.
4. Hub of activity.
5. Major use of technolgy.
6. World as campus.
7. Integrated social services.
8. People centered.
9. Site managed.
10. Staffing alternatives.

COGNITIVE SYNAPSES & ELECTRONIC NETWORKS:

HUMAN RESOURCES DEVELOPMENT FOR LEARNING COMMUNITIES OF THE FUTURE

RESEARCH & ENGINEERING COUNCIL
OF THE GRAPHIC ARTS INDUSTRY, INC.



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AMERICAN LIBRARY ASSOCIATION
OFFICE OF TECHNOLOGY ASSESSMENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
TECHNOLOGY ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE
NATIONAL BOARD FOR PROFESSIONAL TEACHING STANDARDS

Appendix D

Science, Technology, and Society

Dr. Madeleine Friedman presented a vision and action plan for "Science, Technology, and Society." She discussed "Visioning As A Gateway" and the two proposals for $1/2 million she has written since February.

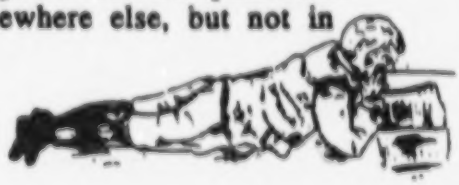
Above All, What Schools Should Model (So Children Will Know In Their Hearts)

1. ***MODEL A REVERENCE FOR LIFE***, for inherent in this concept is the attitude of respect for all living things. A caring attitude toward the environment and a desire to live in global harmony stem from this principle.

2. ***MODEL THE CONNECTION OF HEART TO MIND***, not in separate subject blocks but in a blended weave. We do not live in boxes apart from our feelings, aspirations and moral judgments -- Why do we regularly insist upon teaching, testing, and using knowledge in that way? Heart knowledge walks hand-in-hand with mind knowledge and, together, comprise the moral fabric of both our present culture and our future vision.

3. ***MODEL WHOLENESS***, connecting thinking and feeling to doing, and connecting past and present actions to future implications. We must understand the breadth of our thoughts and actions in connection with a reality that transcends our immediate stretch of space and time; in this way, we will be able to consider the effects of those actions on other people besides ourselves and on future generations beyond our own.

4. ***MODEL COMPASSIONATE PRACTICES*** through modeling and activity. It is not enough for students to occasionally read about compassionate acts. Students should "do" compassion and not just hear about it or read about it or watch it on television, so that this quality becomes real and pervasive in their lives. Be aware that students can also become disillusioned when they get mixed messages about compassionate practice, when compassion is fine as an ideal, somewhere else, but not in this setting . . . not on this issue . . .



5. ***MODEL AN INTRINSIC APPROACH TO TEACHING AND LEARNING***, for that goes along with voluntary lifelong learning in the face of rapid change. Subject matter should be connected with the heart and with one's aspirations, so that teachers do not have to resort to either sticks or carrots in order to "force" students to want to learn.

6. ***MODEL OPTIMISM, PATIENCE, AND CONTROL***, so that the imperfections of life can be seen as motivating challenges, not as crippling stumbling blocks. Perseverence and steadfastness grow from optimistic attitudes; patience and control can be applied to the solving of complex problems and perplexing dilemmas. It takes more strength to control one's negative passions than to yield to them.

7. ***MODEL SELF AS OPPOSED TO self.*** The noble SELF of compassion and caring makes us feel good when we help others; it makes us feel restless when we ignore other living beings who are suffering or who are in pain. A nurtured SELF greatly expands one's self-esteem.

8. ***THEN, GO BEYOND SELF AND MODEL SELFLESSNESS***, for this is the root of the idealistic attitude of altruism. It is not a sign of weakness to be positively and gently idealistic; it is not folly to yearn for altruistic human activity, nor is it unpatriotic to think that all of us in the human community might one day care about each others' well-being. Rather, selflessness is the heart of the great teachings we most admire in the world. Idealistic selflessness fosters positive purpose and universal love.

Madeleine Friedman

Goal No.	Broward County Public Schools Focus 2000 Goals	State of Florida Blueprint 2000 Goals	National America 2000 Goals
1	**Readiness to Start School** - To make a commitment through countywide partnerships that the students of Broward County will come to school ready to learn and remain able to learn.	**Readiness to Start School** - Communities and schools collaborate to prepare children and families for children's success in school.	**Readiness to Start School** - By the year 2000, all children in America will start school ready to learn.
2	**Graduation Rate** - To increase the graduation rate by 10 percentage points.	**Graduation Rate** - Students graduate and are prepared to enter the workforce and post-secondary education. **Adult Literacy** - Adult Floridians are literate and have the knowledge and skills needed to compete in a global economy and exercise the rights and responsibilities of citizenship.	**Graduation Rate** - By the year 2000, the high-school graduation rate will increase to at least 90 percent. **Adult Literacy** - By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
3	**Student Performance** - To redesign the teaching and learning process in order to engage students as active learners and meet their diverse, individual needs.	**Student Performance** - School boards provide a learning environment conducive to teaching and learning that includes sequential instruction in mathematics, science, reading, writing, and the social sciences and appropriate educational materials, equipment, and pupil-teacher ration. **Student Performance** - Students successfully compete at the highest levels nationally and internationally and are prepared to make well-reasoned, thoughtful, and healthy lifelong decisions.	**Student Performance** - By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency over challenging subject matter, including English, mathematics, science, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy. **Student Performance** - By the year 2000, U.S. students will be the first in the world in mathematics and science achievement.

Goal No.	Broward County Public Schools Focus 2000 Goals	State of Florida Blueprint 2000 Goals	National America 2000 Goals
4	**Staff Development** - To infuse the system with accessible staff development activities which support district and school plans and result in increased levels of employee competency and satisfaction.	**Staff Development** - The schools, district, and state ensure professional teachers and staff.	
5	**Organizational Culture** - To provide an organizational culture that promotes and supports effective schools.	**Organizational Culture** - Communities will provide an environment that is drug-free and protects all students' health, safety, and civil rights.	**Organizational Culture** - By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.
6	**Technology** - To commit to an optimum use of technology as a resource to improve all aspects of education.		
7	**Communication** - To improve coordination and communication within and outside the school system to project a more positive public image; to increase knowledge of services, programs and goals; to decrease duplication of information; and to renew a spirit of involvement.		
8	**Resources** - To maximize financial, physical and human resources with accountability to the public for greater efficiency, improved human productivity and increased student achievement.		

Appendix B

Policy Declaration for STS as an Alternative "Curriculum of Choice"

WHEREAS, the America 2000 National Education Goals declare that American students should "demonstrate competency in challenging subject matter" and "be prepared for responsible citizenship"; and

WHEREAS, Florida's Blueprint 2000 goals state that Florida's students should be able to "successfully compete at the highest levels nationally and internationally" and should "display responsibility, self-esteem, sociability, self-management, integrity, and honesty"; and

WHEREAS, Broward County's Focus 2000 goals state that the teaching and learning process should be redesigned "in order to engage students as active learners" and that technology should be used optimally "as a resource to improve all aspects of education";

NOW, THEREFORE, BE IT DECLARED, that there ought to be an officially acceptable option to the current standard of separate content areas and minimum competencies now in force, and that **SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH GLOBAL RESPONSIBILITY AND JOY** should be approved as an alternative

CURRICULUM OF CHOICE

for teachers of Science, Social Studies, Language Arts, and Reading in Grades 6, 7, and 8 in the State of Florida.

TEACHING SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH UNITS OF GLOBAL RESPONSIBILITY AND JOY

YEAR 1: YEAR OF AWARENESS

SPECIFIC GOAL	OBJECTIVE	METHODOLOGY	EVALUATION	BUDGET
1. SUPPORT ESTABLISH NEED TO TEACH STS AS PRIORITY FOR EDUCATORS, PARENTS, AND THE COMMUNITY	100 parents, 5 district educators, and 10 community business leaders will visit the writer's school to participate in STS activities.	1. Launch publicity campaign. 2. Invite representatives to network meetings. 3. Hold STS conference & fair; invite key guests.	• # of parents, district educators, and community business representatives attending STS conference and network meetings	$100.00 for STS Conference & Fair (refreshments and certificates of participation for students)
2. CURRICULUM PILOT AN STS CURRICULUM DEVELOPED FROM *UNITS OF GLOBAL RESPONSIBILITY AND JOY*	Two teacher co-creators at each grade level (6, 7, & 8) will implement 2 corresponding STS *Units*.	1. Write initial *Units of Social Responsibility and Joy*. 2. Create informal teaching alliances. 3. Pilot *Units*.	• # of teacher co-creators at each grade level • Number of STS *Units* implemented	No Cost: Curriculum cocreated independently and outside of school time
3. TECHNOLOGY INTEGRATE TECH. LITERACY AND GLOBAL RESPONSIBILITY VIA INTERACTIVE COMPUTER LEARNING ENVIRONMENTS	All STS students will send at least 2 e-mail messages to students around the world; activity will be part of ongoing STS *Units*.	1. Write e-mail component into curriculum. 2. Have STS students write e-mail messages to peers around the world.	-# of times each STS student sends global e-mail messages • E-mail activities written into STS curriculum	No District Cost: Nova University provides courtesy Vax access for alumni
4. POLICY ESTABLISH STS AS A VIABLE ALTERNATIVE TO TEACHING SEPARATE CONTENT AREAS	Include at least 50% of Fl. frameworks & district objectives for sci., soc. studies, lang. arts, and rdg. in 2 pilot Units each for gr. (6-8).	1. Obtain latest state frameworks and district objectives in targeted subjects, grades 6, 7, & 8. 2. Synthesize elements for STS.	• Percentage of frameworks and district objectives synthesized and accounted for in STS *Units of Social Responsibilty and Joy*	No Cost: Frameworks and objectives synthesized independently at no cost to district
5. HRD PROVIDE ONGOING TRAINING AND RESOURCES NECESSARY TO IMPLEMENT STS	Compile & revise resource bank of philos., rationale, 6 STS Units, & 10 strategies at tchr. network meetings.	1. Hold network support meetings. 2. Compile & revise piloted STS units, strategies, philos., rationale.	• Contents of resource bank • # of teacher network meetings • Attendance at network mtgs.	No Cost: Network mtgs. conducted & resource bank compiled & revised by the writer as an independent consultant

TEACHING SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH UNITS OF GLOBAL RESPONSIBILITY AND JOY

YEAR 2: YEAR OF INTEREST

SPECIFIC GOAL	OBJECTIVE	METHODOLOGY	EVALUATION	BUDGET
SUPPORT ESTABLISH NEED TO TEACH STS AS PRIORITY FOR EDUCATORS, PARENTS, AND THE COMMUNITY	Establish STS Coalition of 25 members, and double number of participants in STS school activities.	1. Augment publicity campaign; develop & distribute brochure. 2. Establish STS Coalition & steering committee 3. Hold meetings 4. STS Conference	• # of STS Coalition members • # of participants in STS school activities	• $200.00 for Fair refreshments, student certificates • $200.00 for 1000 brochures
2. CURRICULUM PILOT AN STS CURRICULUM DEVELOPED FROM *UNITS OF GLOBAL RESPONSIBILITY AND JOY*	Successfully pilot 4 *Units* at each grade, along with new achievement standards & assessments.	1. Revise/augment STS curriculum 2. Draft new standards 3. Draft integrated assessment portfolio.	• 95% of participating students should attain both old & new achievement standards	No District Cost: Curriculum, standards, & assessments will be cocreated independently & outside of schl time
3. TECHNOLOGY INTEGRATE TECH. LITERACY AND GLOBAL RESPONSIBILITY VIA INTERACTIVE COMPUTER LEARNING ENVIRONMENTS	Each STS student will participate in at least one electronic research session; online research will become part of STS curric.	1. Explore FIRNMAIL for appropriate info. 2. Write activity into STS curric. 3. Teach students to use FIRNMAIL for research.	• Record number of electronic research session(s) for each student • Online research written into STS curriculum	No District Cost: access already provided through FIRNMAIL in media center; Nova Univ. provides courtesy Vax access for alumni
4. POLICY ESTABLISH STS AS A VIABLE ALTERNATIVE TO TEACHING SEPARATE CONTENT AREAS	Include 100% of FL frameworks & district objectives in 4 STS Units per grade, with parent/ business/teacher Coalition helping set standards & assessments.	1. Integrate old frameworks & objectives 2. Meet with Coalition to invent new standards & assesments 2. Include the 8 principles in new standards	• New standards drafted for piloting • Students perform at least as well on new standards as on old	No Cost to District
5. HRD PROVIDE ONGOING TRAINING AND RESOURCES NECESSARY TO IMPLEMENT STS	Add 6 units and 10 strategies to resource bank; revise with help of the STS teacher network.	1. Write additional units. 2. Hold teacher networking mtgs to get input on strategies.	• # of new lessons • # of new strategies	No District Cost: Lessons augmented by independent consultant; mtgs. do not require stipend

TEACHING SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH UNITS OF GLOBAL RESPONSIBILITY AND JOY

YEAR 3: YEAR OF UNDERSTANDING

SPECIFIC GOAL	OBJECTIVE	METHODOLOGY	EVALUATION	BUDGET
SUPPORT ESTABLISH NEED TO TEACH STS AS PRIORITY FOR EDUCATORS, PARENTS, AND THE COMMUNITY	Three Reciprocal Community Mentoring (RCM) partnerships will be established and in operation at the writer's school, under the auspices of the STS Coalition.	1. Extend publicity 2. Get Fair Funds. 3. Cocreate RCM proposal, brochure. 4. Speak at mtgs. 5. Pair community mentors with STS classes. 6. Hold Conf./Fair.	•# of RCM partnerships established	• $200 for 1000 brochures • $300 for STS Conference/Fair
2. CURRICULUM PILOT AN STS CURRICULUM DEVELOPED FROM *UNITS OF GLOBAL RESPONSIBILITY AND JOY*	A minimum of 12 teachers will be successfully piloting STS *Units* in the writer's school.	1. Recruit tchrs. 2. Orient new STS teachers to *Units*. 3. Pair old/new STS teachers. 4. Implement *Units*.	• # of teachers implementing STS at end of year #3 • 95% of STS students reach new achievement standards	(See budget for 5th objective below)
3. TECHNOLOGY INTEGRATE TECH. LITERACY AND GLOBAL RESPONSIBILITY VIA INTERACTIVE COMPUTER LEARNING ENVIRONMENTS	Each STS student will participate in at least one online interactive problem-solving activity; this will become part of STS curriculum	1. Write problem-solving modules for online use 2. Each student has opportunity to engage in this type of activity	• Records of on-line interactions for students • Online problem-solving written into curriculum	No Additional Cost to District
4. POLICY ESTABLISH STS AS A VIABLE ALTERNATIVE TO TEACHING SEPARATE CONTENT AREAS	Obtain district waiver in order to substitute new standards for traditional MBS.	1. Write & submit waiver proposal. 2. Show successes & invite Schl Bd & other district reps for schl visit. 3. Appear at waiver hearing.	• New standards revised • New assessments noted •Waiver received	No Cost to District
5. HRD PROVIDE ONGOING TRAINING AND RESOURCES NECESSARY TO IMPLEMENT STS	hold 5 workshops for new STS teachers & 10 peer support network mtgs. for all STS tchrs.	1. Fund workshops 2. Write trainings 3. Hold network support meetings	• # of teachers attending workshops & passing posttest (85% +) • # attending network meetings	$5,000 for consultant fee & for teacher stipends to attend workshops

TEACHING SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH UNITS OF GLOBAL RESPONSIBILITY AND JOY

YEAR 4: YEAR OF COMMITMENT

SPECIFIC GOAL	OBJECTIVE	METHODOLOGY	EVALUATION	BUDGET
SUPPORT ESTABLISH NEED TO TEACH STS AS PRIORITY FOR EDUCATORS, PARENTS, AND THE COMMUNITY	Every district STS school will establish at least 1 RCM partnership.	1. Publicity campaign 2. Fund Conf./Fair. 3. Work with district Chamber of Commerce 4. Speak at mtgs. 5. Meet with new volunteers to pair more mentors. 6. Hold Conf./Fair.	• # of RCM partnerships with district STS schools	• $200 for brochures • $200 for Fair
2. CURRICULUM PILOT AN STS CURRICULUM DEVELOPED FROM *UNITS OF GLOBAL RESPONSIBILITY AND JOY*	20 teachers district-wide will each implement 4 STS *Units* appropriate to gr. level.	1. Speak at teacher mtgs; get new STS implementors. 2. Seek training $. 3. Train teachers. 4. Maintain support network.	• # of teachers implementing STS units districtwide.	(See budget for HRD goal #5, below.)
3. TECHNOLOGY INTEGRATE TECH. LITERACY AND GLOBAL RESPONSIBILITY VIA INTERACTIVE COMPUTER LEARNING ENVIRONMENTS	At least 10 teachers district-wide will engage in ongoing electronic peer support networking and idea exchanges	1. Meet with district STS teachers to present idea & offer training. 2. Obtain funding for addt'l modems & software. 3. Go online/debug	• # of district teachers writing modem grants • # of electronic STS teacher support networkers; dates of online encounters	Modems/Software @ $150 -- funded through Broward Ed. Found. mini-grants; Commercial online hook-ups @ under $500 via Citicorp mini-grants
4. POLICY ESTABLISH STS AS A VIABLE ALTERNATIVE TO TEACHING SEPARATE CONTENT AREAS	Draft proposal for STS as a "curriculum of choice" in ste. course code directory; gain 5 community groups supporting effort.	1. Write proposal. 2. Invite ste. ed. officials to schls. 3. Gain community support through Coalition efforts.	• Proposal written • # of parents, tchrs, & community leaders groups openly supporting this effort.	No additional cost to District; proposal written independently by cocreators
5. HRD PROVIDE ONGOING TRAINING AND RESOURCES NECESSARY TO IMPLEMENT STS	Conduct 5 workshops for 20 new STS teachers, & 10 support network mtgs. for all district STS tchrs.	1. Get grant funding for training. 2. Implement training. 3. Hold network meetings.	• # of teachers attending workshops & passing posttest (85%+) • # attending network meetings	$25,000 to initially train first 20 teachers (more funding will result in larger number of tchrs. trained)

TEACHING SCIENCE, TECHNOLOGY, AND SOCIETY THROUGH UNITS OF GLOBAL RESPONSIBILITY AND JOY

YEAR 5: YEAR OF DEDICATION

SPECIFIC GOAL	OBJECTIVE	METHODOLOGY	EVALUATION	BUDGET
1. SUPPORT ESTABLISH NEED TO TEACH STS AS PRIORITY FOR EDUCATORS, PARENTS, AND THE COMMUNITY	Establish separate RCM committee composed of 7 STS Coalition members dedicated to the ongoing expansion & coordination of RCM's in every STS middle school in the district.	1. Write articles, speak at meetings. 2. Hold district STS fair & conf. 3. Form RCM committee. 4. Develop charter for committee.	• # on RCM committee. • Committee charter written, reflecting ongoing dedication to RCM coordination • # of new RCM's formed in year 5	$1000 for District STS Conference and Fair
2. CURRICULUM PILOT AN STS CURRICULUM DEVELOPED FROM *UNITS OF SOCIAL RESPONSIBILITY AND JOY*	Raise # of STS tchrs. to include at least 1 informal teaching alliance in at least half (15) the middle schools in the district.	1. Obtain funds. 2. Speak at teacher mtgs. 3. Train new teachers. 4. Expand support network.	• Number of middle schools with teachers implementing STS *Units* (minimum of 15)	GRANT: $50,000 to initially train first 40 teachers (more funding will result in larger number of tchrs. , trained)
3. TECHNOLOGY INTEGRATE TECH. LITERACY AND GLOBAL RESPONSIBILITY VIA INTERACTIVE COMPUTER LEARNING ENVIRONMENTS	At least one tchr in each STS school will interact online for peer net-working, & a user's manual for online learning & tchr. networking will be completed.	1. Orient district STS teachers to the online network 2. Obtain teacher & student input districtwide via electronic network 3. Write manual & distribute.	• Manual completed • Number and frequency of teachers using network	No District Cost: manual written by the writer as an independent consultant; piloted by district at no cost.
4. POLICY ESTABLISH STS AS A VIABLE ALTERNATIVE TO TEACHING SEPA-RATE CONTENT AREAS	Gain Florida D.O.E. approval of STS as an alternative "curriculum of choice" in the Florida Course Code Directory.	1. Gv proposal to D.O.E. 2. Engage support of local & ste. representatives. 3. Go to Tallahassee	• STS officially accepted as an alternative "curriculum of choice" for grades 6-8 in state of Florida	No District Cost: funding generated through STS Coalition efforts
5. HRD PROVIDE ONGOING TRAINING AND RESOURCES NECESSARY TO IMPLEMENT STS	Obtain ongoing funding from School Bd. to support continued coordination & expansion of STS	1. Write proposal & job description. 2. Amass support. 3. Submit proposal 4. Lobby Schl. Bd. 5. Go to Bd. mtg.	• STS Coordinator position funded	$150,000 yr. for ongoing STS Coordinator

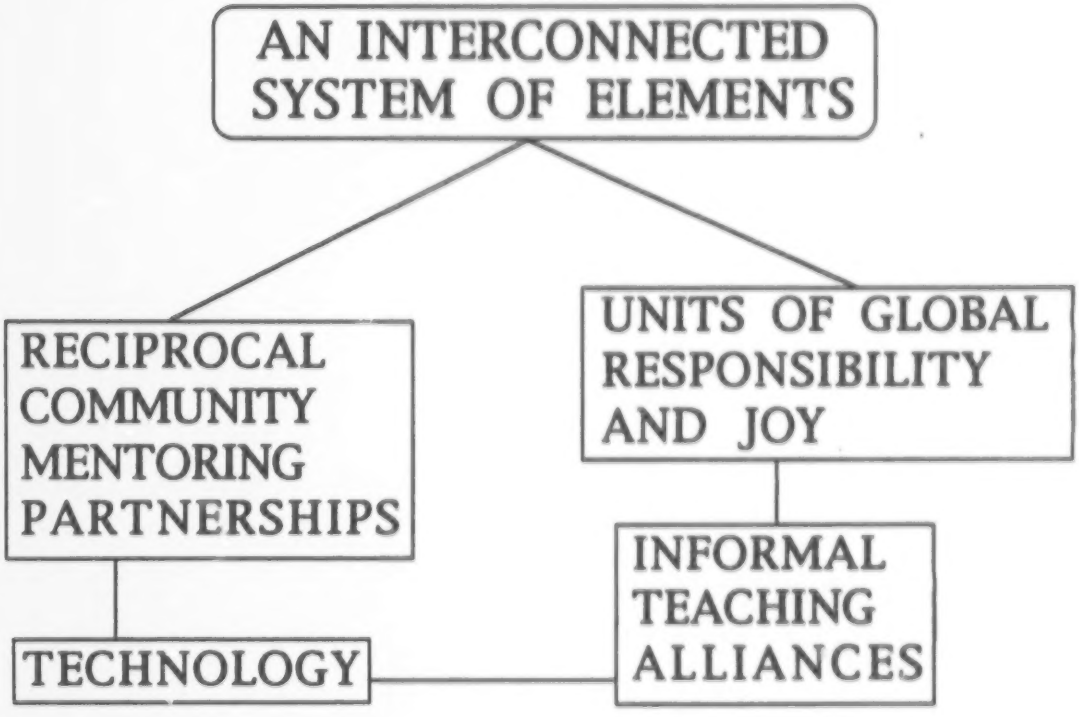
VISIONING
AS A
VIRTUAL GATEWAY

Presented by:
Madeleine Friedman, Ed.D.
July 27, 1993

VISIONING AS A VIRTUAL GATEWAY

STS

TO EQUIP TOMORROW'S LEADERS WITH THE CAPACITY TO WISELY USE TECHNOLOGY FOR THE BENEFIT AND SURVIVAL OF HUMANKIND



APRIL → FEDERAL GRANT: INNOVATION ZONES

SEED IDEA: LINK NOVA COMPLEX
THEME: INTERCONNECTEDNESS

JULY → STATE GRANT: RETROFIT TECHNOLOGY

TECHNOLOGICAL COUNTERPART TO THEME OF INTERCONNECTEDNESS PURSUED IN FEDERAL GRANT

ONGOING → SCHOOL FUNDS, LOCAL TDIF GRANTS (TEACHER DIRECTED IMPROVEMENT FUNDS)

SEEDLINGS: PEACENET; WORLD SCHOOL; KIDS 94 KIDLINK; I*EARN; NATIONAL GEOGRAPHIC KIDS NETWORK; AT&T'S LEARNING NETWORK

VISION

VIRTUAL
FLEXIBLE
MALLEABLE

AN ANCHOR THAT
CAN "SYNERGIZE"

COCREATION - IMPLIES FLEXIBILITY,
A SYSTEMS VIEW . . .

VISION BECOMES GATEWAY

"Systems thinking . . . continually reminds us that the whole can exceed the sum of its parts."
(Peter Senge, The Fifth Discipline)

VIRTUAL VISIONING

In the "virtual" sense used by Malone & Davidow when speaking about virtual corporations creating virtual products that continually respond to the changing needs of their users.

(Malone & Davidow, "Virtual Corporation," in Forbes ASAP, December, 1992)

VISIONING WITH A 21ST CENTURY MIND

THE 21ST CENTURY MIND:

is CREATIVELY ADAPTIVE

is CHALLENGED BY PROBLEMS

is VISIONARY

is WHOLE-SEEING

and ENJOYS ORDERING CHAOS

All of your anxiety is because of your desire for harmony. Seek disharmony; then you will gain peace.

RUMI (quoted in Developing a 21st Century Mind, by Marsha Sinetar)

Madeleine Friedman, Ed.D.

July 27, 1993

CHAOS AS PLAY

"Learn to be comfortable in a transient existence since life is flux." (Marsha Sinetar, Developing a 21st Century Mind

"BIOLOGICALLY, LIFE IS NOT MAINTENANCE OR RESTORATION OF EQUILIBRIUM BUT IS ESSENTIAL MAINTENANCE OF DISEQUILIBRIA, AS THE DOCTRINE OF THE ORGANISM AS OPEN SYSTEM REVEALS. REACHING EQUILIBRIUM MEANS DEATH AND CONSEQUENT DECAY."

(Ludwig von Bertalanffy, Father of General Systems Theory)

"LIFE IS NOT A COMFORTABLE SETTLING DOWN IN PRE-ORDAINED GROOVES OF BEING; AT BEST, IT IS ÉLAN VITAL, INEXORABLY DRIVEN TOWARDS A HIGHER FORM OF EXISTENCE. ADMITTEDLY THIS IS METAPHYSICS AND POETIC SIMILE; BUT SO AFTER ALL, IS ANY IMAGE WE TRY TO FORM OF THE DRIVING FORCES IN THE UNIVERSE" (Ludwig von Bertalanffy, General System Theory)

THUS, VISIONING IS NOT JUST VIEWED AS ONE SYNTHESIS, BUT IS SEEN IN THE SENSE OF: the "synthesis of a general systems theory, replacing the notion of 'organism' and its Platonic correlates with the concept of a dynamic, self-sustaining 'system' discriminated against the backdrop of a changing natural environment." (Ervin Laszlo, Introduction to Systems Philosophy)

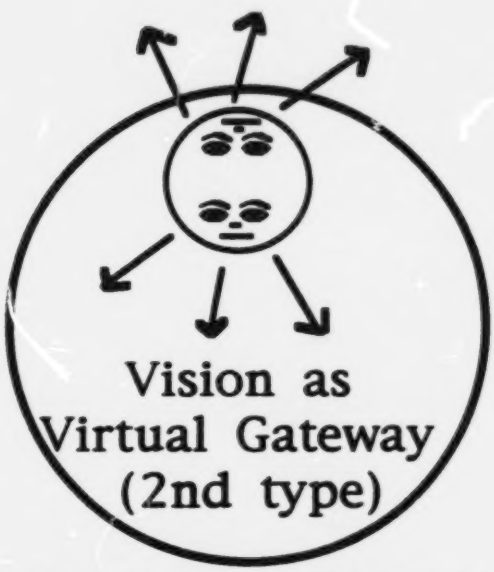
CONCLUSION

STS UNITS OF GLOBAL RESPONSIBILITY AND JOY -- ARE VIRTUAL . . .
. . . and SO IS THE VISION THAT ENVELOPES IT:

- open to changes in the world
- ready and willing to self-adjust -- to be responsive to changes from outside -- what Laszlo calls "the self-creativity of natural systems" (Ervin Laszlo, The Systems View of the World)

VISION AS A JANUS-FACED HOLON

Any vision might thus be viewed as a Janus-faced holon -- as a sub-whole of a larger system -- with two faces: "the face turned towards the subordinate level is that of a self-contained whole; the face turned upwards towards the apex, that of a dependent part." Arthur Koestler, The Ghost in the Machine)



Vision as Virtual Gateway (2nd type)

2 TYPES OF "HOLISM" --
1. WHOLES AS ABSOLUTES
2. WHOLES AS DYNAMIC, RESPONSIVE, SELF-CREATIVE GESTALTS

BLENDING THE 2 FACES OF JANUS AT ANY ONE POINT IN TIME, AND PERPETUALLY EVOLVING AS TIME GOES ON.

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Appendix E

Electronic Library

The Electronic Library is explained on the pages which follow. An example of access to contemporary research can be obtained by reading the comments below and following the directions for accessing the information.

THE WORKING GROUP ON TEACHING AND LEARNING
of the
COALITION FOR NETWORKED INFORMATION

The Working Group on Teaching and Learning of the Coalition for Networked Information issued a call for papers that use networking and networked resources to support teaching and learning. The group is particularly interested in projects that take advantage of national networks, use library resources, involve collaboration among different types of institutions and agencies, and are long-term programs easily adaptable for other schools. Projects submitted become part of a database. Two winners were invited to present at EDUCOM '93.

The Coalition of Networed Information is a joint project of the Association of Research Libraries, CAUSE, and EDUCOM, organized in 1990 to promote the development of networked inforamtion resources to enrich scholarship and embrace intellectual productivity.

Fifteen proposals were submitted to the call for papers in 1992. Thirty-five proposals were submitted in 1993. You can access the proposals as follows:

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mmunix
i      Internet Menu
2.     Internet Tools
3.     Gopher
8.     Other Gopher and Information Servers
1.     All Gopher Servers in the World
12*.   Coalition for Networed Information
         (The number of groups is increasing.
         The number was 120 on September 27, 1993)
4.     Coalition Working Groups
7.     Teaching and Learning Groups
2:     Teaching and Learning WG (Gopher Link)
4.     1993 Propsals (Text)/
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The two winners were:
14. Kids as Global Scientists by Nancy Butler and
23. Peirce Telecommunity Project by Joseph Ransdell.
Check out "Toward the 21st Century" (23).

The Electronic Library
An Introduction with Instructions

What is the Electronic Library?:

The Electronic Library and the Off Campus Library Services office are new services offered by Nova University to bring library services to Nova's non-campus students. By using the Electronic Library, students may access the library catalog, check the periodical holdings, search the catalogs of other libraries, request materials and even ask for help with research from a reference librarian.

The Off Campus Library Services office can provide students with books and copies of periodical articles from the Nova collection mailed directly to their homes. Students can request materials by phone, mail, fax or computer (through the Electronic Library). There is no charge (except return mail for books) and most materials are mailed first class the next business day.

If you wish to contact Off Campus Library Services call 1-800-541-6682. Dial Linda Martilotto at extension #7508 to order materials. If you have problems or reference questions call Steven Vest at extension #7050. To access the Electronic Library simply type "el" at the command prompt in Unix. If you don't have a Unix account contact your program supervisor.

Accessing the Electronic Library by Computer:

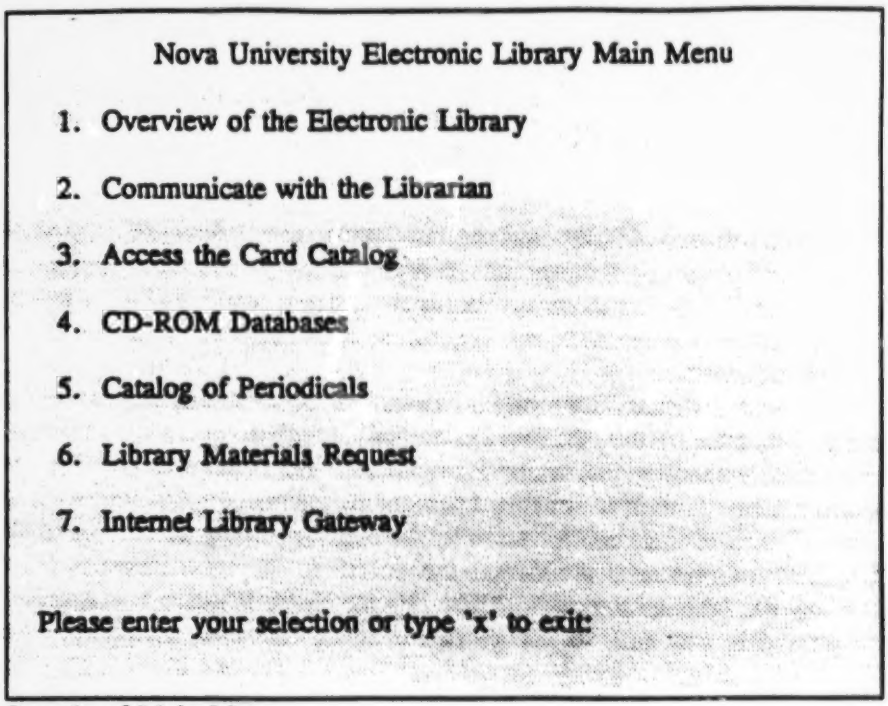
(Remember you can use Off Campus Library Services even without a computer!)

To access the Electronic Library by computer you will need:

1. A home computer (IBM, Compatible, Apple or Other)
2. A modem
3. A communication program
4. A Nova "Unix" computer account

The modem allows your personal computer to talk to the Nova computer using telephone lines. The communication program is what your computer uses to operate the modem. Before you will be able to connect to the Nova computer you will need to be given a computer account. When you get your account you will be given the appropriate phone numbers to call and the passwords you will need to gain access to your account.

When you get the Unix prompt, simply type "el" to gain access to the Electronic Library. When the Electronic Library program is finished loading you will see the following menu:


Nova University Electronic Library Main Menu
1. Overview of the Electronic Library
2. Communicate with the Librarian
3. Access the Card Catalog
4. CD-ROM Databases
5. Catalog of Periodicals
6. Library Materials Request
7. Internet Library Gateway
Please enter your selection or type 'x' to exit:

Sample of Main Menu

The Electronic Library Menu:

Each choice on the menu either explains the Electronic Library and how to use it or gives you access to a library service. To choose an item from the menu, simply type the number beside the selection you wish to choose. For example: if you wanted "Overview of the Electronic Library" you would press the "1" key on your keyboard. *Do not* press "Enter" after your choice. The menu will activate your choice as soon as you press the correct key. Pressing "Enter" will cause the program to end and you will end up circling back to the main menu. Most menu choices will take you into a second menu. This will usually give you the choice of immediately accessing the service or reading the instructions. We recommend that you always read the instructions (and print them out if possible) before accessing a service for the first time. Taking a few moments to read the instructions first can save you much time and aggravation in the long run!

Now lets take a look at the services provided by each choice in the Electronic Library menu.

1. **Overview of the Electronic Library**

   This selection gives a fuller explanation of the Electronic Library and its many services for students.

2. **Communicate with the Librarian**

   This selection allows the student to send electronic mail directly to the librarian (to ask questions etc.) or to contact the librarian directly and "talk" head to head by typing messages back and forth. It will also allow the librarian to talk to multiple students at the same time using the "Electronic Classroom"

   The commands for writing in this section are slightly different from those in other areas. When you choose to send a message to the librarian you are given a screen that has your "Editing Keys" (the commands you will use to move about the screen) on the left and a box on the right that reads "Enter your message below". This is the box where you will type your message. When you are finished composing your message, you press the "escape" key (sometimes referred to as the "menu" or "pf1" key. This moves the cursor to the bottom of the screen. You may then type "Help" (for further instructions), "Send" to send your message to the Librarian or "Cancel" to abort using the message mode. This command structure is common to many of the menus found in the Electronic Library. Many of the screens can be exited by pressing "escape" typing "Exit" or "Cancel"

3. **Access the Card Catalog:**

   This selection allows you to access the "Dialcat" catalog at the Nova University Library. This catalog contains a listing of all of the books available in the Nova Library System. When you choose to search the catalog from the menu you will see your computer go through several seconds of accessing different commands. This is normal. Simply wait until the screen reads "Connected to dialcat.library.nova.edu." and then press "Return" or "Enter" several times in quick succession. When you are asked for a password, type in "VT100". This will take you into the "Dialcat" catalog. The catalog operates on a "menu driven" system. At each step in finding a book you will either choose from a menu or move an arrow beside a selection and press enter.

The easiest way to search is to choose "Find Anything" from the opening menu. Then you may type in the title or the author's name or a subject. Once you press "Return" any book that has a match for the words or name you typed in will be displayed. You then choose the selection from that list to obtain a more complete display. It is also possible to combine words using the "and" or "or" connectors or to eliminate unwanted terms by using the connector "not". Consult the online information guidelines for a more complete explanation of how to use these connectors.

Occasionally you may have emulation problems when you are accessing the Dialcat system. If you have trouble with words being broken up as you type them in or if part of the writing on the screen disappears off the top or bottom; be sure that your communication program is set to emulate a vt100 terminal and that the "scroll" feature is turned off. Consult your communication program manual for instructions on how to change these settings.

When you wish to exit the Dialcat program simply hold down the "Control" key and press "p". You will then be given a prompt that says "dialnet". Type "q" at this point and you will be returned to the main Electronic Library menu.

4. CD-ROM Databases:

At the present time the only CD-ROM database mounted is ERIC, the education index. However in the near future we intend to provide access to a number of other CD-ROM indexes. Because the ERIC index was written for use on a personal computer and not for a UNIX based mainframe computer, there are a number of adjustments that must be made in entering keyboard commands. *It is especially important that you read the instruction section before attempting to use ERIC for the first time!*

The most important adjustment that must be made is that the "Easy Menu Mode" of searching ERIC requires frequent use of the various "F" keys found on a PC keyboard. Unfortunately, the UNIX environment does not recognize these "F" keys and they must be emulated. This is done by pressing "F1" followed by the number keys of the "F" key you wish to emulate. For example: the "F10" key would be emulated by pressing "F1" followed by "1" and "0" from the numeral keys. Also, Unix does not recognize the "Page Down" key. This is emulated by pressing the "Return" key.

If you are using an Apple Computer or another type of terminal besides a PC, you will want to use the other method of entering commands. This is called the "Dialog Mode". The "Dialog Mode" can be invoked from the first menu you are given. This method involves using a set of commands developed for the Dialog information system databases. These commands do not require the use of any

"F" key and allow you to work from any terminal. A complete explanation of these commands is contained in the opening ERIC "help" file. To exit from the "Dialog Mode" simply type "logout".

The easiest method of saving the records you have retrieved using ERIC is to save them in a "Capture Buffer". Nearly all communication programs have a feature that allows you to save everything that appears on your screen to a hard or floppy disk. Then you can quickly scan through your records and print them out from the "capture buffer" at your leisure. Consult your communication software manual for information on how to activate your capture buffer.

5. Catalog of Periodicals:

This selection allows you to search the holdings of the Nova University Library periodical collection. Using it, you can get a listing of the periodicals to which the library subscribes and the range of years that are available. This can save a great deal of time when you are ready to order materials from the Off Campus Library Services office.

The catalog of periodicals is currently kept using the computer program PC-File. This is a simple, easy to use program that is familiar to many people already. When you enter the PC-File menu you will be given a menu of choices. The choice that is already highlighted "Find a Record" is the one you want, so simply press "Enter". Your next menu will also have the proper choice highlighted. Press "Enter" to choose "Search for data (find)" and you will move to yet another menu. On this menu you will want to choose "Simple you fill in the blanks" as your type of search. This will take you to your "Search data" screen. On this screen you will want to fill in the "Title >" blank with the title of the journal you wish to find. Be sure to spell the title correctly. Since the database will be searched for *exactly* what you type in, you may want to type in just the first few words of the title. Then you can choose the one you want from the list that will appear. If your choice is held in the Nova Library collection, the screen will appear with the holdings information filled in. If it is not in the Nova collection the message "Not Found" will appear in a message box. If this happens you may wish to check and be certain that you have the correct title and that it is spelled correctly.

To exit from PC-File and return to the Electronic Library menu choose "Quit" from each successive menu until you are returned to the library menu screen.

6. Library Materials Request:

When you choose this selection you will be given a choice of ordering books, periodicals or ERIC documents. Simply choose the materials you wish to order

from the menu and you will be given a form to fill out for the proper materials. Your name will already appear on the form but you will be asked to fill out information about your program, address, and the materials you wish to order. You must fill out each section or the program will not allow you to send your request. When you wish to move from one field to another simply press the "Tab" key. Once you have completely filled out the form, press the "Escape" key and your cursor will drop to the bottom of the screen. Here you have three choices of actions that you may type in. If you type "Help" a help screen will appear. If you type "Cancel" your request will be canceled. If you type "Send" your request will be sent to the Librarian and your materials will be pulled and mailed to you usually the next business day. When you have sent a request, the information about the article or book you ordered will be erased from the form, but your address information will be retained in case you wish to request another item.

7. Internet Library Gateway:

This selection gives you access to the internet network. Internet is a huge network of computers held in businesses and universities all over the world. There are literally thousands of different information sources available for access through Internet. For now we will concentrate on accessing libraries through the network. When you choose the Internet Gateway you will be given a second menu with three choices. The selection you will want to choose from this menu is "2. World-Wide Access to Electronic Libraries (Hytelnet)". This will take you to a listing of the various countries' libraries that can be searched. Once you have chosen a country you will be given a choice of libraries within that country. To choose a library, simply highlight the one you want and press "Enter" you will then be given some very basic instructions on operating the catalog of the library you are about to search. Make note of these commands especially the command for exiting the database. In that there are thousands of libraries, each with catalogs that operate differently, it is impossible to give instructions on how they will operate. It is often best to spend some time experimenting with the catalogs to learn your way around the command structures. Indeed you'll probably want to spend lots of time experimenting with all of the different reference sources available through Internet.

Conclusion:

Well that ends our introduction to the Electronic Library. If you have any questions or comments, send them E-mail to "vest". Or call Steven Vest at the Off Campus Library Services office at 1-800-541-6682 ext. 7508 or 7050. We're anxious to hear your opinions or suggestions

Appendix F

Practicums and MARPS

1. Human Resources Development Proposals and Reports

2. Emergence of Vocational, Technical and Occupational Education in America Proposals and Reports

3. Conceptual Framework for Chapter 5 by Dr. Sarah Simpson-Ussery

4. Major Applied Research Project Abstracts

HRD PRACTICUMS

No date means "in process"

1. Norma M. McKinnon, Jan 21, 1991

Development of a Professional Activities Handbook Governing Financial Assistance to Staff as Funded by the Title III Grant.

2. Richard Scott, Mar 21, 1991

Development of a Peer Collaboration Program for Faculty Development Through Improved Communications.

3. Charles R. Heck, Jr., Mar 31, 1991

Development of a Course/Instructor Evaluation Form...

4. Jean Love, Apr 2, 1991

The Design, Implementation, and Evaluation of a Professional Development Workshop.

5. Dolores Yaschur, May 12, 1991

Development of a Document that Will Serve as a Working Plan for the Implementation of an Employment Affirmative Action Policy.

6. Weymouth Spence, October 21, 1991

A Cost Analysis Study of the Radiography Program at Middlesex Hospital Using Shock's Model.

7. Jennifer Dowd, April 26, 1993

Development of a Faculty Search Committee Guide for Mercer County Community College.

8. Ronald Williams, May 21, 1992

Improvement of Attendance Rates Through the Implementation of a Student Tracking System at New York City Tech College

9. Walter A. Meyer.

Development of a Training Reference Manual for College Faculty Who Train in Business and Industry.

10. Sherry A. Dunphy, March 18, 1993

Development of a Training Program for Cholesterol Screening Personnel.

11. Robert D. Bolge, April 11, 1993

Development of a Plan To Make the Office of Institutional Research A Human Resources Development Utility at Mercer County Community College.

12. Elon W. Roach, April 11, 1993

Development of a Plan to Train Middle Level Administrators in Strategic Planning.

13. Pamela B. Farrell, February 24, 1993

Design for A Writing Across the Curriculum Faculty Retreat.

14. Anthony J. Mennuti

The Development of a Grant Management Handbook: A Guide for Grant Project Managers.

15. Susan Ross Bell, June 26, 1991

Identifying Classroom Motivating Factors in the School of Business at Missouri Southern State College.

16. Mary Pat Neylon, May 30, 1993

The Development of an Orientation Manual for New Part Time Faculty at Molly College.

17. Polly A. Schultz, August 25, 1991

Developing A Workshop To Train The Secretaries Employed By Villa Julie College To Use The Tab Feature In Wordperfect 5.1.

18. John L. Coleman

Assessing the Morale of the Kansas City Missouri Police Department and the Need for an Effective Human Resources Utilization Program.

19. Alice L. O'Neill, December 15, 1992

Development of an Orientation Program for Adjunct Health Administration Faculty at the University of Scranton.

20. Steven B. Dowd, Sept. 7, 1991

An HRD Action Plan for the Radiography Program Sponsored By Lincoln Land/St. John's Based on a View of the Radiographer of the Future.

21. Ronald Kopcho

An Evaluation of Humanities Division Faculty Perceptions of the Need for a Multicultural/International Dimension in Curricula, Graduates, and Activities.

22. Andrew Niesiobedzki, Nov. 18, 1991

Development, Implementation, and Evaluation of a Workshop on Conflict Resolution for the Division of Arts and Letters at Manatee Community College

23. Ken James, February 27, 1992

Development and Validation of a Workshop on Basic Maintenance for Industrial Technology Education Instructors in Polk School Districts

24. Valerie Zimbaro, Nov. 3, 1991

The Development and Validation of a Strategic Human Resources Development Plan for the St. Petersburg Junior College Communications Program

25. Robert D. Head

The Development of a Policy and Procedures Handbook for Music Faculty at Shaols Community College

26. Robert J. Yapsuga, September 29, 1991

The Development of an Orientation Manual And Video for New Employees of the Penn State Allentown Campus

27. Lucy E. Bartlett, February 18, 1992

Student Evaluation of Tutors: The Development of an Evaluation Form

28. Alberto L. Rodriguez

The Development of a Faculty Handbook for the Assessment of Prior Experiential Learning

29. Ralph Gracia, January 24, 1991

The Development of a Training Program on Contract Audit Follow-up for the Defense Plant Representative Officer

30. Cheryl Billingsley, December 16, 1991

The Development of a Staff Manual for the Admissions Intern at Adams State College

31. Carolyn Breen

Development of A Survey to Identify Stressors in the Supervision of Clinical Services at the University of Medicine and Denistry of New Jersey

32. William P. Messier, January 3, 1992

Using the Preziosi Model to Determine Faculty Perceptions of Florida Memorial College

33. James E. Christian, March 20, 1992

The Development of a Strategic Planning Model for Stillman College

34. Sandra F. McLendon, April 14, 1992

The Development of an Incentive Pay System for Use at Sue Bennett College

35. Susan Keen, December 16, 1991

The Development of a Competency Model for Professional Educators at Aetna Life and Casualty

36. Paul G. VanLandingham, March 30, 1992

The Development of a Culinary Teacher Preparation Guide for Production Kitchen Chefs at Johnson & Wales University

37. Frank G. Miglorie, Jr., March 3, 1992

The Development of a Trustee Handbook for the College of St. Joseph

38. John J. Conklin, June 30, 1992

The Development of an Articulation Plan for the University of Connecticut School of Social Work and Practicum Settings

39. Clarence M. Baskey, February 27, 1992

The Development of a Policy and Procedure Manual for Anchor Counseling, Inc.

40. William E. Boyer, March 18, 1992

Developing and Administering an Organizational Questionnaire to Simulator Instructors

41. James D. Dalton, April 27, 1992

The Development of an Employee Handbook for the Grove City Christian Child Care Center in Grove City, Ohio

42. George B. Wingblade, June 10, 1992

Development of a Service Guide Handbook for the Department of Physical Plant at Amherst College

43. Kenneth A. Carpenter

A Survey of the Microcomputer Training Needs of Faculty of Greater Hartford Community College

44. Ester G. Pratt

The Development of a One Day Training Seminar on Intimacy and Relationships for Catholic Charities

45. Mehtap Scofield

The Development of a Guide for Planning a Turkish Language Lesson Plan at the Big Bend Community College

46. James Earl Taylor, January 30, 1992

The Development of Guidelines for Remediation of Speaking Anxiety

47. Steven L. Ray, February 28, 1993

Establishment of an Adjunct Faculty Professional Development Program at Palo Alto Community College

48. Gerry Oenbrink, May 12, 1992

The Development of a Training Program for Center for Psychological Studies Site Coordinators

49. Mark Kolodziej, September 11, 1992

Predicting Successin First Year Calculus: Traditional Classroom Versus Computer Managed Learning

50. Cathy M. Whitson, September 26, 1992

Development of a Survey Identifying Perceived Need for Basic Skill Training at Advanced Circuitry/Litton, Springfield, MO

51. Lisbeth Ceaser, March 29, 1992

The Development of an Inservice for Instructional Grouping in an Integrated Language Arts Classroom

52. Jenny Perry Horton

Development of a Manual To Assist With Support Services Delivery to Vocational Student Organizations and Special Populations in North Carolina

53. Napoleon Mills, July 8, 1992

Development and Validation of a Workshop on Basic Computer Operations For Vocational Shop Instructors at Manatee Area Vocational and Technical Center

54. Jane L. Forrest, Jane 4, 1992

The Development of a Teaching Excellence Strategic Plan

55. Ekow O. Hayford

An Analysis and Assessment of Classroom Management by Three Business Instructors of Stillman

56. Linda Schultz, April 18, 1992

The Revision of a Leadership and Management Curriculum to Incorporate Total Quality Management/Leadership Concepts For United States Navy Supply Corps Officers

57. Anita Mitzner, March 30, 1992

The Development of Team Building Seminars For Faculty at the Foothills Hospital School of Nursing

58. Christine D. Loftin, April 27, 1992

Identification of Specific Needs to be Met by an On-site Child Care Program at Okefenokee Technical Institute

59. Wayne Manning, July 8, 1992

The Development of a Faculty Development Plan for Panhandle State University

60. Jack R. Sexton, April 26, 1993

An Evaluation of the Early Alert Program of the Counseling Department at Paradise Valley Community College

61. Susanne K. Stark, April 27, 1992

The Development of a Procedure for Planning the Annual Workshop for Personnel Development at Hudson Valley Community College

62. Belva J. Stelk, March 21, 1993

Development of an Inservice Seminar for Faculty at Saint Joseph College of Nursing

63. Camilla A. H. Westenberg, March 18, 1993

Development of a Faculty and Staff Orientation Seminar for the Preparatory Resource Education Program.

64. Joan Crews, August 10, 1992

Student Evaluation of Psychology 100 Based on State Competencies

65. John F. Fisher, December 2, 1992

Design of a Questionnaire to Determine a Need for a Senior Citizen's Institute at Holy Family College

66. Wayne Manning

The Development of a Faculty Development Plan for Panhandle State University

67. John Lester

Participants Perceptions Concerning the Effectiveness of Program Design for an Industry Based Provider of Continuing Medical Education.

68. Andrea Asha Rodriguez, December 21,1992

The Development of a Comprehensive Supervisory Development Program for South Carolina State University.

69. A. Bibi Laurie, June 7, 1993

Development of a Humor Workshop for Instructors at Grande Prairie Regional College

70. Sharon Falzone, December 28, 1992

Development of a Plan to Facilitate Adoption to Management Change Required by Product Line Implementation

71. Clara J. Coleman

A Developmental Two-Day Self-Help Management Skills Workshop for Minorities

72. Sharon A. Martin, April 15, 1993

The Development of a Handicapped Student Services Manual for the Faculty of Wenatchee

73. Daryl L. N. Sutton, January 21, 1993

Development of a Preceptor Training Program in the Nursing Department at Los Angeles Pierce College

74. Debra S. McDowell

(CT)2: A Seminar on Current Trends in Clothing and Textiles

75. Dana A. Wilkie, December 9, 1992

The Development of a Training Manual for the Pace University Ambassador Organization

76. Jewel E. B. Euto, February 17, 1993

Development and Validation of an Instrumental Lifelong Learning Unit on Co-Dependency for Tri-County Rehab, Inc.

77. Michael K. Newman, December 2, 1992

The Development of a Survey Instrument to Assess the "Learning How To Learn" Knowledge andd Skills of Adult Educators in the Department of Adult Education in Anderson County.

78. James T. Kushner, July 13, 1993

An Assessment of the Need for Professional Development of Adjunct Faculty at the Community College of Allegheny County North Campus.

79. Venda Raye-Johnson

The Development of a Career Development Workshop for Black Professionals Co-sponsored by Blakcs in Management and the University of Missouri-Kansas City.

80. Gary D. Clark, February 8, 1993

The Difference in Knowledge of Substance Abuse Between Student Anesthetists Who Have Completed A Substance Abuse Workshop and Those Who Have Not

81. Al Infande, March 18, 1993

The Development of an Employee Handbook For Newly Hired Employees of Celebrity Cruises

82. Richard C. Bundsgaard

A Strategic Plan For Determining the Competencies Required in Desktop Color Electronic Prepress

83. Edward H. Lyle, February 1, 1993

A Comparison of Grade Point Averages Between High School Graduates and Non-High School Graduates at a Private Junior College

84. Shirley Schantz

Development of a Clinical Evaluation Tool for the School of Nursing

85. Lois Lund

Development of a Standardized Policy for Evaluating Experiential Learning

86. Terry Overlock, March 29, 1993

Assessment of Faculty Perceptions of Performance at Northern Maine Technical College

87. Samuel Neale, May 19, 1993

The Development of a Stress Management Program For Air National Guard Recruiters to Assess the Level of Burnout and Introduce Intervention.

88. Philip F. Janssen

The Development of a Framework for a Strategic Management Plan for American League Umpires

89. Judith Hatula, March 29, 1993

The Development of a Twenty-Hour Course in the English Language for the Tour Guides of a Telecom Museum

90. Howell F. Wright

The Development of a Handbook for Adjunct Professors on the Basic Concepts of the Profession of Human Resource Development.

91. Larry A. Bustetter, May 24, 1993

Development of a Workshop Designed to Enhance the Presentation Skills of Clinical Laboratory Instructors in a School of Medical Technology

92. Denise E. McDowell

The Identification and Dissemination of Information on Existing Educational Resources Within the Metropolitan Community College District

93. Dick Thompson, May 17, 1993

Development of a Standardized Written Pre-Flight Checklist for a PA 28-181 Aircraft

94. Gene Pease, July 21, 1993

A Survey of Training Characteristics of Sylvan Learning Systems Adult Educators

95. Josefa Garcia, Aug 4, 1993

Development of a Human Resources Plan for Gateway Community College Library

96. W. Dale Farley, March 18, 1993

Development of a Plan to Justify the Future Need for Human Resources Development at the Naval Avaition Depot

97. Hugo E. Edwards

To Develop An Entrepreneurial Program for Adult With Psychiatric Disabilities

98. Patricia A. Culbert, June 13, 1993

The Development of an Adjunct Faculty Handbook at Teikyo Post University

99. Claire Wadman

Development of a Support Staff Performance Evaluation System

100. Wendy E. Walker

Development of a Student Handbook for Adult Students at Dutchess Community College

101. Judith Metzgar, August 30, 1993

Development of a Resource Guide for the Teaching of Criminal Justice Writing

102. Norma Lugo-Irizarry

The Development of an Institutional Handbook For New Non-Academic Employers and Supervisors

103. Alan Algee, August 20, 1993

The Development of a Plan for Ministerial Training in Pacific Siberia

104. M. Bruce Pelkey

Development of a Faculty/Staff Guide for Assistance to Disabled Students at College of the Canyons

105. Cynthia E. Jolliff-Johnson

An Evaluation of the Efectiveness of St. Petersburg Junior College Policy Regarding Students on Academic Probation

106. Timothy H. Ricordati

The Development of a New Instructor Traning Program for Part-time Practitioner Faculty Teaching Adult Students at a Graduate School of Management

107. James J. Lauria

Total Quality in the Classroom: A Comprehensive Review of the Literature

108. Marian P. Laufer

Development of Americans with Disabilities Act Program for Nursing Service at Community Hospital

109. Connie M. Fosson

Evaluation of a Faculty/Student Collaboration Model for a Professional Conference.

110. Kathleen P. Habel

Development of a Workshop to Train Part-Time Instructors of Community Educ. Classes for Adults at Broome Community C.

111. Mary J. Foley

The Development of a Mentoring Project for the Massachusetts /Rhode Island League for Nursing.

112. Chong-Sun Hong

The Development of a Policy on English Education at Hankuk Aviation University.

113. George A. Floyd

Developing, Planning, and Implementing a Staff Development Program at Shawnee Community College

114. David L. Jeselnik

The Development of a Marketing Plan to Pulicize the Programs of the Chautauqua Center of Okaloosa-Walton Community College

115. Ernest J. Fleury

Development of a Program to Increase Solid Waste Disposal Awareness for Students at Johnson & Wales College of Culinary Arts

116. Ronald E. Carney

Analysis of the Demographic of the Three County Service Area of the Thomas Technical Institute for the Development of a Strategic Plan

117. Ching-Chieh Lien

An Investigation of the Employment Situation of Recent Graduates of the Refrigeration and Air Conditioning Program at National Taiwan Normal University.

118. Margaret Haines

The Development of a Program to Improve the Retention at Brewton-Parker College

119. Gladys Diggs

The Development of a Grant Proposal to Expand the Substance Abuse Treatment Programs at the Amarillo Veterans Affairs Medical Center

120. Linda W. Swisher

Development of an Interactive Video for the Interview Process for a Nursing Program

VTO PRACTICUMS

1. Sept. 20, 1989 James C. Scott P-HRD

A Study to Analyze Students' Awareness of the Career Resource Center's Services

2. Sept. 23, 1989 Brian Saterlee P-HRD

A Study to Determine the Job Satisfaction of the Engineering - Industrial Technology Faculty at Delgado Community College

3. Sept. 30, 1989 Onesima Santos E-VTO

Comparison of Pre and Post Mean Scores in Accuracy Performance After a Formal-Directed Proofreading Instruction

4. Oct. 23, 1989 Betty Reynaud P-HRD

Comparison of Stress of Industrial Arts Teachers with Business Education and Home Economics Teachers

5. Jan. 3, 1990 Jerrold Backman P-HRD

Development of Training Seminar to Enable Industrial Arts Instructors to Teach High Technology Curriculum in Sarasota County

6. Jan. 29, 1990 Mary Alice Watson P-HRD

The Development of a Competency-Based Instructor Evaluation Instrument for the Heart of Georgia Technical Institute

7. Feb. 12, 1990 Michael Wayne Cupples P-HRD

A Study To Survey The Workers' Attitudes Concerning Computers in the United States Army Aviation Center

8. April 9, 1990 Vicky B. Cooke E-VTO

The Development and Analysis of a Questionnaire to Determine Career Counseling Needs in Local Industry

9. April 23, 1990 B. Ann Harang E-VTO

Development of an Early Alert System for At Risk Students in the Business Studies Division at Delgado Community College

10. July 29, 1990 Ken Gordon E-VTO

A Survey of the Microcomputer Training Needs of George Stone Center

11. July 29, 1990 Carolyn A. Standridge E-VTO

The Development of a Plan to Improve Mental Health Treatment to Students with a Mental Health Diagnosis

12. August 9, 1990 Keith Ellen Ragsdale E-VTO

Identification of New and Anticipated Technology Affecting Nursing Practice In Austin Area Hospitals

13. September 9, 1990 Robert L. Hooks E-VTO

A Study to Develop a Single-Parent and/or Displaced Homemaker Brochure for the Office of Student Development at the Moultrie Technical Institute

14. September 9, 1990 Robert L. Hooks P-HRD

A Study to Develop a Financial Aid and Consumer Information Brochure for the Office of Student Development at the Moultrie Technical Institute

15. September 27, 1990 Denny Woodall Neilson E-VTO

The Development of a Cooperative Education Plan for the Darlington County School District

16. October 4, 1990 Keith Ellen Ragsdale P-HRD

Determination of the Effect of Student Admission Criteria and The Admission Process on Admission of Minority Students to Associate Degree Nursing Programs

17. December 3, 1990 David Ryan P-HRD

Comparison of Traditional and Innovative Methods of Teaching Entrepreneurship (Completed February 26, 1991)

18. December 6, 1990 Nita I Heck E-VTO

Development of a Plan To Minimize Potential Health Hazards Associated With Increased Utilization of Video Display Terminals

19. Mar 21, 1991 James David Platner P-HRD

Analyzing Leadership Style and the New Director's Impact Upon Faculty and Students at Metro Business College

20. January 26, 1991 Alexander Peng My E-VTO

Identification of New and Anticipated Equipment Affecting Machine Technology Practice of Los Angeles Area Manufacturers

21. Alexander Peng My, February 26, 1991 P-HRD

Survey of Industry to Determine Interest in and Need for a Technician-Level Training Certificate in Machine Technology

22. Alma F. Shamblin, March 11, 1992 P-HRD

A Comparison of Achievement Scores Using A Remedial and Traditional Unit of Instruction in Business Mathematics

23. Beulah G. Timmons, April 11, 1991 P-HRD

Development of Inservice Projects for Personnel in Small Clinical Laboratories: Utilization of a Staff Development Model

24. Linda Sweat, September 17, 1991 P-HRD

A Survey of Communication Skills That Aircraft Sheet Metal Employers in the Heart of Georgia Technical Institute Service Area Expect of Employers.

25. Napoleon Mills, June 21, 1992 E-VTO

Development and Validation of an Apprenticeship Program For Firefighters and Fire-Medics.

26. Yng-Chien Sheu, October 22, 1991 E-VTO

An Analysis of the Skills Necessary for Offset Printing Graduates of Vocational Technical School in Taiwan

27. Beulah G. Timmons, September 20, 1991 E-VTO

The Development and Utilization of a Survey Form for Education Project Evaluation by Technical Personnel in Small Clinic Laboratories

28. Donald J. Clausing, September 19, 1991 P-HRD

A Comparison of Changes In Job Satisfaction Among The Faculty of The Engineering And Technology Division at Delgado Community College.

29. Margit O. Giles, February 18, 1992 P-HRD

The Development of A Dropout Prevention Plan for Brookland-Cayce High School

30. Joyce Pappachristou P-HRD

The Comparison of Traditional Instruction Versus Televised Instruction on Recidivism For Prison Inmates

31. Polly A. Schultz, November 24, 1991 E-VTO

A Study To Determine Whether A Relationship Exists Between A Student's Grade Point Average And Number of Hours Worked

32. Sarah Simpson-Ussery, January 9, 1992 P-HRD

The Development of a Literacy Tutor Training Workshop For Loxley Inmates

33. Ralph Gracia, April 2, 1992 E-VTO

The Development of a Reference Manual on the Advanced Tactical Fighter for the Defense Plant Representative Office

34. Sarah Simpson-Ussery, November 19, 1991 E-VTO

The Development of a Vocational Component for Literacy and Adult Basic Education Student-Inmates at Loxley Correctional Facility

35. Kenneth James, September 21, 1992 E-VTO

Development and Validation of a Competency-Based Student Learning Guide for Employability Skills Orientation at Ridge Vocational Technical Center

36. Beverly Lembo, May 7, 1992 E-VTO

The Development of an Integrated Vocational Academic Instructional Manual for the Rhode Island Department of Education

37. Robert Bremke, October 4, 1992 E-VTO

An Examination of Student Perceptions About Vocational Service Clubs at Deerfield Beach High School

38. Jack Conklin, February 27, 1992 E-VTO

The Development of a Technology Handbook for the University of Connecticut School of Social Work

39. Mary Alice Watson, November 19, 1991 E-VTO

Development of a Manual For Occupational Advisory Committee Members

40. Linda Sweat, December 27, 1991 E-VTO

The Development of a Media Plan for the Heart of Georgia Technical Institute

41. Carolyn Breen E-VTO

Development and Implementation of a Questionnaire to Identify Factors Affecting the Selection of the Dental Assisting Program Option

42. George J. Pastor, April 27, 1992 E-VTO

Evaluation of Advising Services to Chef-Apprentice Students at Hillsborough Community College

43. Mark Kolodziez, September 1, 1992 E-VTO

A Comparison of Enrollments in A Technical College With Projected Future Occupational Trends

44. Yng-chien Shue, September 1, 1992 P-HRD

The Development of a Plan to Increase Participation in the Masters Program of the Industrial Education Department at National Taiwan Normal University

<u>All Practicums Are Now E-VTO</u> (Except #57 & 62)

45. Terry M. Barber, May 21, 1991

An Assessment of Desired Competencies of High School Graduates as New Hires in Pulp and Paper Mills

46. Paul G. VanLandingham, May 21, 1991

The Development of a Bachelors Degree Program in Culinary Arts at Johnson and Wales University

47. John F. Lester, May 21, 1991

A Programmatic Needs Asessment for an Industry Based Provider of Continuing Medical Education Activities

48. Thomas P. Smith, September 23, 1992

A Comparison in Rank Advancement of Uniformed and Partially Uniformed Boy Scout Troops

49. Shiraz Shariff

Determination of the Competency Level of Social Workers Skills In Dealing With Ethnic Minority Clients

50. Christine D. Loftin, December 1, 1992

Development of Guidelines of Recommended Characteristics for an On-Site Child Care Program at Okefenokee Tech Institute

51. Jewel E. B. Euto, November 30, 1992

A Follow-up Study of General Educational Development Graduates in Citrus County, Florida

52. Katherine F. Williams, February 17, 1993

A Solution for the Reduction of High Attrition Rate of Business Education Students Taking The Machine Transcription Course at Moultrie Technical Institute

53. Richard C. Bundsgaard

Analysis of Software for Desktop Color Electronic Prepress at the University of Wisconsin-Stout

54. Althea W. Stevens

Development of an Accounting Software Operator/User Manual for the D.J. Pitts Corporation

55. Betty Jo Wimmer, March 29, 1993

The Development of a Capstone Internship Experience For Seniors at Salisbury High School

56. Robert Freeman, March 18, 1993

The Development of a Preservice Orientation Process for New Part-Time Faculty at the British Columbia Institute of Tech

57. Robert Freeman, March 18, 1993

An Assessment of Alberta's Competency-Based Apprenticeship Training Program for the Possible Inclusion at the British Columbia Institute of Technology

58. Mary L. Hunkin, March 23, 1993

An Evaluation of the Work Habits Curriculum of the Supported Training and Rehabilitative Instrucrtion in the Vocational Education Program

59. Alden P. Gaudreau

Development of a Proposal for the Renewal and Rejuvenation of the Mechanical Engineering Technology Department at Hudson Valley Community College

60. Ernest Fluery

Development of a Competency-Based Curriculum for the Skills of Meatcutting Class at Johnson & Wales College of Culinary Arts

61. Joan Crews, September 13, 1993

Development and Validation of Math Application Problems for Cosmetology Program at Okefenokee Technical Institute

62. Mary Hunkin

Examination of "The Individuals with Disabilities Education Act" to Determine Which of the New Provisions Pertain to the Secondary Students in the Gwinnett County Public School System

CONCEPTUAL FRAMEWORK FOR CHAPTER 5

RESEARCH QUESTION 1, GENERAL INMATE CHARACTERISTICS

1. As with the nation-wide population of inmates, there is a low level of academic attainment (6.84 yrs.) for total sample at G. K. Fountain and Holman. Nation-wide there is also a high level of learning disabilities and low levels of vocational preparation which hinder prospects for employment.

2. Standards of moral/ethical correctness differ markedly from that of the general population.

3. Inmates are the product of primarily female heads of family.

4. A significant portion of the prison population, nation-wide were incarcerated as juveniles.

5. There is an overrepresentation of African Americans under the jurisdiction of the criminal justice system in this country.

6. A significant portion of the prison population nation-wide has a substance abuse problem, either with alcohol or non-prescribed narcotics.

QUESTION 1, GENERAL INMATE CHARACTERISTICS (CONCLUSIONS)

1. Well over 50% of Alabama inamtes are high school drop-outs, who are functioning at perhaps 2-3 grade level below the one they indicate having completed. Many are among the unidentified learning disabled. They are unemployable at a livable wage or salary level because of their lack of academic and vocational skills, though the majority of survey respondents denied this. The majority of inmates nation-wide have a sketchy employment history primarily because of their limited educational preparation.

2. Because moral and ethical standards differ markedly from the general population, some inmates (sociopathic personalities) are able to commit crimes without remorse. Many do not see the harm in taking what they perceive they need at the moment. A combination of diminished mental capacity and the harsh implications of poverty also often overshadow rational or ethical decisions.

3. The inmates are generally economically and socially deprived, when compared to the general population of males who were reared in a two parent family. The men generally have not had strong male role models to emulate, and they do not understand family and parenting responsibilities. Ninty-four (90.4%) of the total sample indicated that such instruction would be "useful," to "very useful" for them.

4. At G. K. Fountain 39.2% of the students, and at Holman, maximum security, 60.6% of the students had been incarcerated as juveniles. The inmates continue to surface in the justice system because they are very little changed by the incarceration process. Behavioral change appears not to have taken place as a result of juvenile incarceration.

5. At G. K. Fountain 56.9% of the students are African American, at Holman 81.8% of the students are African American, and Holman, death row students were 40% African American. On the national level 25% of African American males between 18 and 30, are under the juristiction of the court system. In Baltimore and Washington, D. C. the number is approaching 50%. As a group, young African American males, particularly those in large urban areas, are at peril.

6. Though many denied a problem with substance abuse, survey participants felt assistance in this area would be useful. The federal, state, and local governments combined, spent approximately $100 Billion during the Bush administraiton on the War on Drugs. But, only a third of the money was spent on drug treatment. The result, the United States has become the nation with the largest percentage of its people behind bars. (This is due to primarily to the 'get tough' on drug users/pushers position. Imprisonment without treatment for addition will not solve the problem.)

QUESTION 1, GENERAL INMATE CHARACTERISTICS (IMPLICATIONS)

1. Because there is no formal intake testing, that includes the identification of learning disabilities, there is no way to determine the number of student-inmates at G. K. Fountain and Holman who have such deficits. Though students are enrolled in a variety of academic and vocational areas, the 6.84 grade level, may explain the inability of this population to make sound decisions, to solve problems, to articulate their needs, or to function effectively in free society. Until correctional educators address the deficits, the majority of inmates will return to the prison system within one year.

2. The basic moral and ethical standards for this group differ markedly from the general population. It is apparent that moral cognitive therapy is necessary across the curriculum and across all phases of the prison experience for behavioral change to occur. Without a concerted effort by correctional educators, to help inmates make changes in their moral and cognitive behaviors, society will only have produced a criminal with good academic and vocational skills.

3. The individuals in the study represent the general prison population and are adult children of primarily fatherless and economically deprived homes. The initial loss of a dominant male role model has left many wanting information about family and parenting relationships. The survey participants also requested information and instruction in social skills.

4. The cost of warehousing most inmates in the state of Alabama is approximately $15,000. per year. The majority of inmates at the study site 62 (59.6%) would not identify their number of incarcerations, due, perhaps to embarrassment. For those who have multiple incarcerations, the expense to the state and to the individual has been too costly, for seemingly neither has benefited.

5. /6. It appears that the nation is losing the war on drugs through the mandatory sentences without parole for non-violent drug offenders. As a nation we are seeing the criminalization of a generation of young African American males. We are also seeing yearly seizures of $1.6 billion worth of citizen's property. However, insufficient sums of this money which should comes from the seizures is directed toward education and treatment.

QUESTION 1, GENERAL INMATE CHARACTERISTICS (RECOMMENTIONS)

1. (a) Provide the testing and evaluation necessary to remediate the deficits, so that inmates can work toward achieving their potential.
   (b) Move toward competency-based curricuum and provide as much computer assisted instruction as possible.
   (c) Provide opportunities for all inmates to develop stronger sense of self-esteem, through the achievement of success in educational endeavors.
   (d) Computer literacy is a "must" in the job market, the students at the study sites were enthusiastic about using the computers, and the use of computers has proven to increase basic skills scores.
   (e) Needed are a broad range for academic and vocational courses to include pre-employment preparation, job placement, and follow-up.
   (f) Provide opportunities for inmates to develop critical thinking/problem solving skills, across the curriculum.

2. (a) Provide moral/cognitive behavioral therapy and character development across the curriculum. These approaches employ reinforcement schedules and other stimulus-response methods. The approach focuses on how one thinks and behaves, and helps clients identify and alter irrational and inappropriate thoughts and actions.
   (b) Provide sexual abuse therapy for both the abused and the abuser.
   (c) Provide spiritual/religious studies.

3. (a) Provide home and family life education in addition to personal development curriculum. Content to include, social skills, partner relationships and responsibilities, sexual responsibilities, parenting and family relationships and responsibilities, housing and tenant rights and responsibilities, nutrition and food preparation, stress management, goal setting, and money management. Social skills will include social etiquette and communication skills (speaking, listening, body language).

4. (a) Examine juvenile education programs to determine what works and what does not work.
   (b) Identify the the students with special needs/learning disabilities (the number will be very high) and focus on remediation.
   (c) Provide competency-based curriculum and opportunities for successful experiences with the educational process that will build self-esteem.
   (d) Provide moral, cognitive behavioral therapy across the curriculum, to refocus juveniles' thinking and behavior to prevent their recidivism, either as juveniles or adults.
   (e) Provide home and family life, personal development curriculum as with adult inmates.
   (f) When released, juvenile males must be under the supervision of a strong male role model.
   (g) Also recommended, inmate specific model implemented for juveniles, in an effort to ward off their reincarceration as juveniles or adults.

5. (a) Employ strong male role models that will teach self-esteem and appreciation for the African American experience, as well as an appreciation and respect for other groups of people.
   (b) African American males must help each other to change the mind-set that is literally killing their young men.

6. (a) Provide substance abuse therapy at all institutions. This can be a combination of the the moral, cognitive therapy approach applied to substance abusers, and alcoholics anonymous theory and support groups.

RESEARCH QUESTION 2, FACTORS CONTRIBUTING TO RECIDIVISM.

RESEARCH QUESTION 3, FACTORS THAT STUDY RECIDIVISTS ATTRIBUTE TO THEIR REINCARCERATION.

RESEARCH QUESTION 4, ARE THERE DIFFERENCES BETWEEN THE THREE POPULATIONS AT FOUNTAIN AND HOLMAN REGARDING THEIR INCARCERATIONS, AND THEIR EDUCATIONAL NEEDS.

RESEARCH QUESTION 5, COMPONENTS OF SUCCESSFUL PROGRAMS THAT CONTRIBUTE TO LOWERED RECIDIVISM.

RESEARCH QUESTION 6, THE MULTIPLE CURRICULAR COMPONENTS THAT WILL ADDRESS INMATES' NEEDS.

RESEARCH QUESTION 2, FACTORS CONTRIBUTING TO RECIDIVISM. (CONCLUSIONS)

2. The factors that contribute to recidivism, are generally the same factors that contributed to first incarcerations. The factors, in general may be traced back to the social and environmental deprivation caused by poverty. Children, of poverty are less well nourished, usually less well nurtured, less well socialized, and less well prepared for the challenges and opportunities of life, than their counterparts, who were reared in middle or upper-class homes.
   Poor post-release support systems include weak family systems and over-worked, and often uncooperative and unresponsive agency personnel. The return to substance abuse, old friends, and former unnacceptable behavior patterns are also factors in rearrest and subsequent imprisonment.

RESEARCH QUESTION 3, FACTORS, STUDY RECIDIVISTS ATTRIBUTE THEIR REINCARCERATION. (CONCLUSIONS)

3. The major cause recidivists identified for their incarceration was substance abuse, followed by living beyond their means, committing a crime, poor parental supervision, and wrong association.
   The reasons stated for recidivism by study respondents, may also reflect the frustrations of poverty. Although substance abuse is not the exclusive challenge of the poor, alcoholism statistics are high among this population. Inmates also recognized that poor parental supervision and association with "bad" companions contributed to the imprisonment. Conversations with the men revealed that at the time of their release, two other factors appeared problematic. Upon release, the men are returned, by bus, to the county where they committed the crime (s) prior to their incarceration. This becomes a financial problem if they are not being returned to their home town. The ten dollars that the inmates receive upon release must be spent for further transportation.
   A number of men spoke of returning to crime immediately because they literally had no financial resources the last time they were released. Options are extremely limited for the under educated and impoverished

RESEARCH QUESTION 4, ARE THERE DIFFERENCES BETWEEN THE THREE POPULATIONS REGARDING THEIR INCARCERATIONS AND THEIR EDUCATIONAL NEEDS. (CONCLUSIONS)

4. There were no significant differences between the populations, regarding their incarcerations. As a group, the students saw value in basic skills and vocational education, 38 (36.5%) students from the total sample, suggested what they called a readjustment program. A readjustment/transition program would include pre-employment instruction and other related preparation, attempting to make inmates as current as possible with the demands and expectations of the free world. Students were interested in problem solving, family and parenting relationships and responsibilities, housing responsibilities, money management, stress management. and substance abuse. In conversations with inmates, some indicated that they would like regular religious/ spiritual study.

RESEARCH QUESTION 5, COMPONENTS OF SUCCESSFUL PROGRAMS CONTRIBUTING TO RECIDIVISM (CONCLUSIONS)

5. Literacy, basic skills, vocational skills, pre-vocational training and support, to include job placement and follow-up. Follow-up is a form of support. The teaching of thinking and problem-solving skills appears to be helping. The teaching of ethics and moral values. Peer-tutoring programs promote self-esteem, and social responsibility. Drug and alcohol/substance abuse programs are essential. Computer technology and Special education programs are also essential, due to the large number of learning disabled among the population.
   Home and family life courses that focus on sexual responsibility as well as parenting/parenting responsibilities. Personal development that includes social skills. The extensive use of community volunteers.
   Committed educators, who receive ongoing in-service development.

RESEARCH QUESTION 6, THE MULTIPLE CURRICULAR COMPONENTS THAT WILL ADDRESS INMATE NEEDS. (CONCLUSIONS)

6. All of those mentioned above. An outreach program that seeks out each inmate for counseling and an invitation to participate in education. Mandatory intake testing and evaluation for correct placement and remediation etc. A staff committed to the success of students. Ongoing staff development for students, as peer-tutors, guards, and instructional staff. Some incentives for participation.

RESEARCH QUESTION 2, FACTORS CONTRIBUTING TO RECIDIVISM. (IMPLICATIONS)

RESEARCH QUESTION 2, FACTORS CONTRIBUTING TO RECIDIVISM. (RECOMMENDATIONS)

Although all education should be considered pre-release preparation or transitional programming, for a variety of reasons not all students will take advantage of the educational opportunities. Therefore, a mandatory prerelease program is suggested that would include pre-employment skills, communication skills, (speaking , listening, body language), social skills, money management, goal setting, sexual responsibility, home and family life skills. Use of computers also appropriate, some, if not most of the men are concerned about being "brought up to speed" in terms of societal expectations.

a) Make education and rehabilitation the primary goal of incarceration.
b) Provide incentives for those who participate in education.
c) Institute follow-up activities that provide a support system for inmates upon their release from the system. This must include substance abuse support and employment counseling andplacement.
d) Articulation among prisons in the state of Alabama should occur to assure that inmates are able, upon transfer to other institutions, to complete educational programs, prior to their release from the system

RESEARCH QUESTION 3, FACTORS, STUDY RECIDIVISTS ATTRIBUTE TO REINCARCERATION. (RECOMMENDATIONS)

a) Same as above.
b) Through government grants or private business, inmates must be provided a way to accrue a financial base before they are released.
c) Teaching staff at the study sites must be provided with inservice training that will help them to better understand their students, and to better preparing their students for free society.

RESEARCH QUESTION 4, ARE THERE DIFF. BETWEEN THE THREE POPULATIONS REGARDING THEIR INCARCERATIONS AND THEIR EDUCATIONAL NEEDS. (RECOMMENDATIONS)

No

RESEARCH QUESTION 5, COMPONENTS OF SUCCESSFUL PROGRAMS CONTRIBUTING TO REDUCED RECIDIVISM. (RECOMMENDATIONS)

a) discussed in recommendations for Research questions 1, 2, 3,

RESEARCH QUESTION 6, THE MULTIPLE CURRICULAR COMPONENTS THAT WILL ADDRESS INMATE NEEDS. (RECOMMENDATIONS)

a) The inmate-specific curriculum model is recommended as an initial step in meeting the diverse needs of incarcerates, and should be accepted in that light. Through monitoring and evaluation of program components, individual institutions are encouraged to make changes and adapt new ideas and practices that will enhance the model's effectiveness in treating the whole person, and in reducing recidivism.

b) Strong HRD component that includes training in provision of caring learning environments that increase self-esteem for instructors, students, guards etc.
c) Heavy recruiting and training of inmates as peer teachers/ tutors (makes them socially responsible for others, increases their self-esteem, and makes them role models for emulation). Student involvement in educational decision-making.
d) Heavy recruitment and training of community volunteers for literacy and basic skills training, particularly mathematics.
e) Intensive use of computer technology for training of staff and students.

MAJOR APPLIED RESEARCH PROJECTS

Program Review - Dr. Brian C. Satterlee, 1991

"The Development, Implementation, and Evaluation of a Model for the Review of Associate in Science Degree Programs" consisted of three phases: protocol development, test of the protocol, and evaluation of the pilot test.

Strategic Planning - Dr. Steven B. Dowd, 1992

"Development of a Future-Based Strategic Plan for a Radiography Program."

Human Resources Dev. - Dr. Michael Wayne Cupples, 1993

"Workforce Education and Training Requirements for Communication and Information Technologies at the United States Army Army Aviation Center."

Strategic Planning - Dr. Niann-Chung Tsai, 1993

"A Strategic Plan for Nontraditional, Off-Campus, Bachelor's Degree-Completion Programs at the World College of Journalism and Communications" (Taipei, Taiwan).

Strategic Planning - Dr. John J. Conklin, 1993

"The Development of Strategic Plans for Implementing Distance Education in Social Work Education."

Human Resources Dev. - Dr. Sarah Simpson-Ussery, 1993

"The Development of a Comprehensive Inmate-Specific Curriculum Model."

Strategic Planning - Dr. Robert W. Collins, 1993

"A Handbook on Strategic and Operational Planning for Chairpersons at Chabot College."

Abstract of a Major Applied Research Project presented to Nova University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

THE DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF A MODEL FOR THE REVIEW OF ASSOCIATE IN SCIENCE DEGREE PROGRAMS

by

Brian C. Satterlee

May, 1991

Seminole Community College will begin the process of reaffirmation of accreditation with the Southern Association of Colleges and Schools by the appointment of its self-study committee in 1991. Faculty and administrators had expressed a concern that the current program review protocol was inadequate, and that a contemporary program review protocol should be developed and implemented to comply with the Southern Association of Colleges and Schools criteria for accreditation. The purpose of this Major Applied Research project was to develop, implement, and evaluate a program review protocol at Seminole Community College for an associate in science degree program.

The basic research questions provided a structure to answer issues relating to (1) have standard criteria been developed at the various states-level for the review of

associate in science degree programs; (2) what should be included in the program review protocol developed for Seminole Community College; (3) can the protocol be developed to accommodate both the Florida State Board for Community Colleges and the Southern Association of Colleges and Schools requirements for program review; and (4) can the program review protocol be successfully implemented at Seminole Community College?

The procedures followed in this research project were executed in three phases: protocol development, pilot-test of the protocol, and evaluation of the pilot-test. The protocol was developed in three steps. First, the related literature was reviewed to ascertain the findings of previous research pertinent to program review. The findings of the literature review were used to develop the elements of comparison between requests for program review protocol information solicited from twenty-two public community college systems. Second, the protocols supplied by the state community college systems were compared and analyzed to develop (1) a matrix of elements of comparison among state-level program review protocols, and (2) a list of generally accepted program review evaluative criteria. Third, the program review protocol was developed from the conceptual framework provided by the literature review and comparative analysis.

The program review protocol was implemented via pilot-test on the college's associate in science degree program in

Electronics Engineering Technology. The pilot-test was then evaluated in terms of evaluative objectivity, ease of implementation, availability of supporting documentation, and integration with both the Florida State Board of Community Colleges and the Southern Association of Colleges and Schools requirements for program review.

The conclusions of this Major Applied Research Project paralleled the research questions and were presented as a result of this study. Criteria have been developed by various states for the review of associate degree programs. The program review instrument should include three to six evaluative criteria supported with relevant documentation for each of the following sections: program purpose; program quality; program demand; program cost; projected changes in purpose, quality, demand, and cost; and conclusions and recommendations. The program review protocol incorporated both state and accrediting agency requirements and was successfully implemented at Seminole Community College.

As a result of this study, the following additional conclusions concerning the review of associate degree programs were presented. First, program review will emerge as a major educational issue during the 1990's. Second, successful program reviews are eclectically developed to meet the specific conditions of an institution. Third, the most critical factor of program review is the utilization of results. Fourth, those individuals responsible for the implementation of the

recommendations should be active participants in the entire process. Fifth, program review is a political process. Opportunities exist for the unscrupulous to use the results of program review in a corrupt manner. Hence, the potential exists for the practice of program review to become detached from its intended original purpose of the improvement of program quality to becoming counterproductive to the well-being of the institution.

Recommendations were suggested as a result of this Major Applied Research Project. The program review protocol should be presented to the dean of applied technologies for possible college-wide implementation. Seminole Community College should develop and implement in-service workshops concerning the program review process for all affected instructional personnel. The program review protocol should be diffused at three levels: institutional, state, and national.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

DEVELOPMENT OF A FUTURE-BASED STRATEGIC PLAN FOR A RADIOGRAPHY PROGRAM

by

Steven B. Dowd

August 1992

The purpose of this investigation was to develop a strategic plan based on a view of the future radiographer. This plan is being used by a radiography program sponsored by Lincoln Land Community College, a comprehensive community college, and St. John's Hospital, an 800-bed teaching institution. The steps involved in this major applied research project were: (a) update a previously developed environmental scan for this study, (b) analysis of the scan; leading to (c) development of a strategic plan that included human resource development, curriculum, and equipment planning. The strategic plan was developed in response to the learning needs of radiologic technologists in what Groff (1989) calls the advanced technical society.

The research questions posed in this study were:

1. What is the future role of the radiographer?

2. What is a valid strategic plan for the radiography program sponsored by Lincoln Land/St. John's based on (a) the view that other radiography program

directors from large schools have of the future radiographer, and (b) the plan used by other large schools?

The steps in the developmental problem-solving process were: (a) a review of the related literature on strategic planning in education; (b) refinement of a previously developed view of the radiographer of the future; (c) development of a questionnaire for a mail survey of 61 radiography program directors managing "large" programs (a capacity of 30 students or more) in the Midwest; (d) administration of the questionnaire; (e) data analysis; and (f) integration of the data from the external scan with the internal goal-setting process of the program to develop a future-based strategic plan for the program.

Five assumptions found the greatest agreement among the directors surveyed and were used to develop the strategic plan. This plan is now a part of the regular evaluation process for the program. The strategic plan described program goals, strengths, weaknesses, opportunities, and threats, as well as recommendations for the program. The plan was evaluated by three groups and found to be valid for the program. This process may be duplicated in whole or in part for radiography programs wishing to develop future-based strategic plans. Future research on the planning process in radiography education should focus on successful plans.

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WORKFORCE EDUCATION AND TRAINING REQUIREMENTS FOR COMMUNICATION AND INFORMATION TECHNOLOGIES AT THE UNITED STATES ARMY AVIATION CENTER

by

Michael Wayne Cupples

January, 1993

Effective institutions have a clear mission and a plan or set of plans to achieve that mission. The mission of the United States Army Aviation Center (USAAVNC), Fort Rucker, Alabama, is to provide career education and technical training of high quality to aviation personnel who are critical in keeping the peace or in waging a successful integrated air and ground war. To accomplish that mission, the Army is making increased use of state-of-the-art communication and information technologies for administrative purposes and for the development, delivery, and support of classroom instruction and flight training.

The purpose of this Major Applied Research Project (MARP) was to identify the workforce education and training requirements for communication and information technologies that form the key elements of a USAAVNC human resources development plan. Working on the MARP involved a practical understanding of the USAAVNC mission and a conceptual comprehension of

total quality management, workers' skills, applications, and workforce education and training for technologies in today's advanced technical society.

There were four major research questions: (1) what are the communication and information technologies that will be used for administrative purposes and for the development of instruction over the next several years? (2) what are the worker critical skills that will be necessary to use the next wave of these technologies? (3) what will be the educational and training requirements of the workforce? and (4) what are the key elements of a USAAVNC human resources development plan? These questions were answered with both qualitative and quantitative data.

Qualitative data were collected from key personnel interviews, discussions by a group of experts, and survey questions. The quantitative data were collected from a survey sample of 198 workers in the Directorate of Training and Doctrine (DOTD), USAAVNC. Analysis of results using developmental scientific methodology produced four categories for organizing interpretations, conclusions, and recommendations concerning communication and information technologies: (1) mission, policies, and plans; (2) applications; (3) worker critical skills; and (4) workforce education and training requirements.

The MARP results revealed that the mission of USAAVNC must be more clearly understood and must be the conceptual framework for development of policy and the creation and continuous refinement of plans for the development of organization and human resources. Policies must be created for systematic and planned implementation of state-of-the-art communication and information technologies and for the development of organization and human resources.

The applications of communication and information technologies that are crucial contributions to the successful accomplishment of the USAAVNC mission are the micro-computer, software features, a high quality printer, a digital color copier, a facsimile (Fax), data base(s), a modern phone system, and interactive network(s) of distributed systems. Workers need the critical skills of willingness/ability to learn; understanding information; recognizing concepts; synthesizing implications; organizing efforts; solving problems; basic computer skills; and knowledge of systems, software, and procedures.

The workforce education and training requirements for communication and information technologies can be grouped into four essential areas of consideration: (1) strategy, (2) scope, (3) standards, and (4) primary critical tasks. These areas represent the basis for the key elements of a human resources development plan. Education and training should be (1) conducted as soon as a worker is assigned, (2) synchronized to be timely with arrival of technologies, (3) standardized to facilitate learning and meet job requirements, and (4) linked to personnel and funding management documents.

The MARP has been made available to the Army research community to support more educational research and statistical studies to build the analytical underpinnings of a solid foundation for the planning of workforce education and training in the Army school system. Senior leaders and key personnel must recognize that, ultimately, the security of the United States is based upon competent human resources that use state-of-the-art technologies. Only when humans and technologies are properly combined is the United States in a position of global leadership and influence to preserve the peace.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment
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of Doctor of Education

A STRATEGIC PLAN FOR NONTRADITIONAL, OFF-CAMPUS, BACHELOR'S DEGREE-COMPLETION PROGRAMS AT THE WORLD COLLEGE OF JOURNALISM AND COMMUNICATIONS

by

Niann-Chung Tsai

May 1993

The World College of Journalism and Communications (WCOJC) is a private and non-profit institution in Taipei, Taiwan. It was originally a vocational high school of journalism and then became a junior college in 1959. WCOJC gained approval from the Ministry of Education (MOE) to become a four-year institution that offers the bachelor's degree to its students, starting in the fall semester of 1991.

The purpose of this project was to develop a strategic plan for the development of nontraditional, off-campus, bachelor's degree-completion programs at WCOJC. Because WCOJC was a junior college, thousands of its alumni could not obtain their bachelor's degrees at the school. The proposed programs will help WCOJC

alumni complete their bachelor's degrees from various distant locations in Taiwan, without considering the restrictions of time and place.

The primary focus of this Major Applied Research Project (MARP) was to create a strategic plan to use distance educational technologies and techniques to help WCOJC alumni complete their bachelor's degree in a nontraditional manner. The research questions posed in this study were as follows: (1) What forms of nontraditional education programs are used by other industrialized nations? (2) Why are nontraditional education and alumni continuing education--specifically within the distance education formats--important to Taiwan and WCOJC? (3) What types of nontraditional, off-campus, bachelor's degree-completion programs are suitable for WCOJC and what kinds of experience can WCOJC learn from the United States and Canada, where there has been a long tradition of distance learning? (4) What nontraditional, off-campus, bachelor's degree-completion programs should be developed initially at WCOJC? (5) How should WCOJC begin to develop nontraditional, off-campus, bachelor's degree-completion programs for its alumni or program-interested people?

A developmental problem-solving methodology was used to examine the above research questions. The steps in the process were as follows: (1) performing a thorough review of the literature, (2) conducting an alumni survey to determine needs and wants of alumni, (3) conducting an administrative survey to determine administration attitude toward program development, (4) interviewing internal administrators and external experts to provide optimum information for this development, (5) developing the plan, (6) reviewing the plan for validation purposes, and (7) submitting the plan to the president of WCOJC.

A five-year strategic plan was created that includes introduction, the mission of WCOJC, definitions of basic terms, rationale, development guidelines, program design, regional network, instructional media selection, and human resources development activities.

The conclusions made in this study included (1) distance education in Taiwan has a long way to progress; (2) the alumni and administrators of WCOJC, in general, can accept the idea of using distance education programs for continuing education; (3) the development of distance education programs requires

strong institutional support; (4) faculty reluctance and resistance to distance education should be considered in strategic planning; (5) informative sessions are required; and (6) the key of institutional restructuring is strategic planning.

The following are recommended for the program implementation: (1) help MOE officials understand how nontraditional education programs work; (2) persuade MOE to approve the plan; (3) provide information to prospective students, instructors, and administrators; (4) utilize effective educational technologies; (5) obtain institutional support; (6) develop an evaluation method; and (7) provide a plan to revise the programs accordingly.

The creation of this strategic plan for nontraditional, off-campus, bachelor's degree-completion programs at WCOJC was the first step in raising the awareness about the potential for alternative education in Taiwan. If MOE approves the strategic plan, the implementation of the plan will help make WCOJC alumni more competitive in the global village of the twenty-first century.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment
of the Requirements for the Degree
of Doctor of Education

THE DEVELOPMENT OF STRATEGIC PLANS FOR IMPLEMENTING DISTANCE EDUCATION IN SOCIAL WORK EDUCATION

by
John J. Conklin
June, 1993

The United States is in transition from a post-industrial era through an early technical stage into an advanced technical era. Rapid advances in research and development, particularly in communications and information technology, yielded widespread global restructuring in the manufacturing sector of the economy in the 1970's and 1980's, a trend that will continue in the decade of the 1990's.

The services sector of the economy is beginning to restructure, particularly in education, health, and human services. The problem is that social work education is lagging behind in the use of information and communication technologies.

The purpose of the Major Applied Research Project (MARP) was to develop two strategic plans for distance education. One was presented to the Educational Policy Committee of the University of Connecticut School of Social Work (UCONN). The other was presented at the Council on Social Work Education (CSWE) annual meeting to the North American Field Educators and Directors Network Steering Committee (NAFEDN) in Nev York City, in February, 1993.

For the MARP, a developmental problem-solving methodology was used. A conceptual framevork was created through a literature search, visitations to sites which use distance education, consultation with experts, plus local and national conference attendance. A pilot training program was started at UCONN which included lectures, a technology manual, and a 15-minute videotape. A questionnaire was administered to measure the effectiveness. The response rate was 91%. Students can be trained effectively in distance education through a pilot training program.

A second questionnaire was sent to the directors of field education at 124 graduate schools in Canada and the United States. Questions were posed about distance education, planning and technology used by

schools of social work, universities and practicum agencies. The response rate was 75%. Not many schools of social work are using distance education. Media facilities at the universities can be used for distance education. Some social agencies are beginning to use distance education.

Four conclusions were reached. Distance education can enhance social work education. Second, it is already being used by other professions. Third, distance education has no geographic, physical, or temporal limitations. Fourth, distance education can be used to restructure social work education.

The recommendations came from the focus on adult learners, distance education, and the need to restructure social work education. It is recommended that: (a) UCONN begin to use distance education, (b) NAFEDN begin to use distance education to modernize teaching, and (c) distance education be used to keep social work teaching current with educational advances in the information age.

Abstract of a Major Applied Research Project Presented to
Nova University in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Education

THE DEVELOPMENT OF A COMPREHENSIVE INMATE-SPECIFIC CURRICULUM MODEL

by

Sarah Simpson-Ussery

July 1993

The purpose of this Major Applied Research Project was to develop an inmate-specific curriculum model that will be responsive to the diverse needs of incarcerates, thereby helping to increase their opportunities for post-release success. The underlying rationale for the study was that a causal relationship exists between characteristics exhibited by the typical inmate and his or her inability to live lawfully and productively outside prison.

The study took place at G. K. Fountain, a medium security prison, and Holman, a maximum security prison. Both prisons are located in Atmore, Alabama and both receive academic and vocational education services from Jefferson Davis Community College (JDCC).

The developmental problem solving methodology was used to create a comprehensive inmate-specific curriculum model. Within the developmental framework, the case study technique was used to

conduct the investigation. The case study technique was selected as an appropriate problem solving methodology because it allows the collection of qualitative data from a variety of relevant sources. The technique is also highly desirable for the study and analysis of complex social issues, such as those leading to incarceration.

The questions posed in this study were: (a) What are the general characteristics of the inmate population that must be addressed in planning a comprehensive inmate-specific curriculum model?; (b) What are the primary factors that contribute to recidivism of inmates?; (c) To what factors do the recidivists at G. K. Fountain and Holman Correctional Facilities attribute their reincarceration?; (d) Are there differences between the G. K. Fountain and Holman student-inmates on factors related to their incarcerations, and their perceived educational needs?; (e) What are the components of correctional education and rehabilitation programs that appear to meet the whole person needs of inmates in making and sustaining a successful transition to life in society?; and (f) What are the multiple curricular components of a comprehensive inmate-specific curriculum model that will address the unique whole person needs of incarcerates?

The steps in the problem solving process were (a) a review of the literature, (b) development of instruments for student-inmates, site educational staff, correctional education authorities, and judges, (c) pilot testing of instruments, (d) refinement of the instruments, (e) administration of the instruments, (f) collection of instruments

and other documentation, (g) analysis and interpretation of data, and (h) integration of data from the instruments and related sources for the development of the inmate-specific curriculum model.

Two major conclusions were reached as a result of this study. First, because the general inmate population exhibits characteristics that differ from those of the general population of free citizens, inmates require specific learning opportunities that will assist them in overcoming a variety of social disadvantages and academic deficits. Secondly, it is to societies' advantage to provide inmates with the education, habilitation, and rehabilitation that will allow them to become full participants in society.

The Inmate-Specific Curriculum Model evolved from evidence gathered through the problem solving process. The Goal-Setting component of the model was taught at Holman, and the instructional materials are now available to student-inmates at G. K. Fountain.

The student-inmates' evaluation of the Goal Setting component of the model, along with the results of the case study and the Inmate-Specific Curriculum Model were presented to the Dean of Instruction at JDCC and the Dean of Extended Programs at G. K. Fountain and Holman Correctional Facilities. A copy of the documents was also made available to the Alabama State Administrator for Adult Correctional Education.

Abstract of a Major Applied Research Project Presented
to Nova University in Partial Fulfillment of the
Requirements for the Degree
of Doctor of Education

A HANDBOOK ON STRATEGIC AND OPERATIONAL PLANNING FOR CHAIRPERSONS AT CHABOT COLLEGE

by

Robert W. Collins

September 1993

Planning responsibilities in community colleges occur at several levels. To achieve a college's mission, leaders develop planning processes that examine the strengths, weaknesses, opportunities and threats. These processes yield strategic directions that become goals and objectives for college units. The implementation of institutional plans with unit goals and objectives are then carried out by chairpersons, faculty and support staff.

Success in attaining an institutional mission while maximizing effectiveness depends to a great degree on the performance and operation of academic departments. Academic departments are the heart of colleges and universities and are where the success of an institution is determined. Competent planning by academic departments with often limited resources is crucial to maintaining

instructional quality and realizing both institutional and departmental goals. The problem is that chairpersons who manage academic units are often lacking basic planning skills. As a result, academic department managers often find themselves unfamiliar with planning strategies and techniques. The result of this study provided chairpersons at Chabot College with a handbook that will serve as a guide for departmental strategic and operational planning.

The study answered the following research questions:

1. What format should be used in preparing the handbook that will allow planning concepts to be readily implemented by department chairs?

2. What planning tasks do chairpersons need to address?

3. What planning methods and procedures are appropriate at the department level?

4. What planning strategies and techniques are needed when a budget freeze or cut occurs?

Steps in the study included (a) the review of related literature describing planning concepts, the need to link planning with budgeting, and strategies to cope with budget freeze or reduction; (b) the solicitation of current departmental planning procedures being used at various technical and community colleges; (c) the synthesis of planning concepts and procedures into a conceptual framework for department use; (d) the preparation and validation of a preliminary draft; and (e) the revision and preparation of the final version.

The following seven major conclusions were reached during the study: (a) research on planning concepts, strategies and procedures has been focused at the institutional level; (b) a number of technical and community colleges across the nation have not prepared materials intended to assist chairpersons in planning; (c) there is interest among colleges in utilizing strategic and operational planning methods within their departments; (d) institutional planning concepts and procedures can be modified for use by departments; (e) planning and budgeting activities can be linked when preparing departmental plans; (f) chairperson can utilize a variety of strategies to cope with departmental constraints; (g) the handbook can assist department chairs in attaining unit goals and achieving institutional mission.

From the study, the following eight recommendations were made: (a) more research needs to be conducted that will result in the preparation of planning materials for academic departments, (b) professional organizations need to promote the benefits that can be gained by institutions through effective departmental planning, (c) community colleges nationwide should use the handbook as a model to prepare and implement departmental plans, (d) upper management needs to support the use of strategic and operational planning at the department level, (e) organized activities should be held to allow chairpersons an opportunity to discuss and debate the merits of comprehensive department planning, (f) workshops need be held to instruct chairpersons with the use of planning tools, (g) organized

Appendix G

Science and Technology: Impact on Workforces and Workplaces

The networking session began and closed with remarks. The opening remarks highlighted technology, the relationship between research and development and economic development, the need for trend analysis, Federal Laboratory Consortium, establishments and jobs, NSFNET and networks in New York and New Jersey, and integration and tech-prep.

Numerous questions were raised and networking occurred. After much discussion, a question about future directions led into closing remarks. An analysis of restructuring that was occurring in the late 1980s indicated (a) a great deal of activity in early childhood units; (b) restructuring in schools within contemporary traditional education, increase in use of technology, an emphasis on cooperative lifelong learning and outcomes based education, and the rise of other education and training providers; and (c) some reform in what is now postsecondary education. The analysis yielded a conceptual framework - "Info Era Learning Communities of the Future" and insights about how the above-mentioned "choices" would evolve in the 1990s. Concluding comments were on human resources systems of the future based on contemporary research about the cognitive sciences and communication and information technologies with a diagram listing participants who could contribute to an "academy" for a specialization in graphic arts and printing.

SCIENCE & TECHNOLOGY: IMPACT ON WORKFORCES AND WORKPLACES

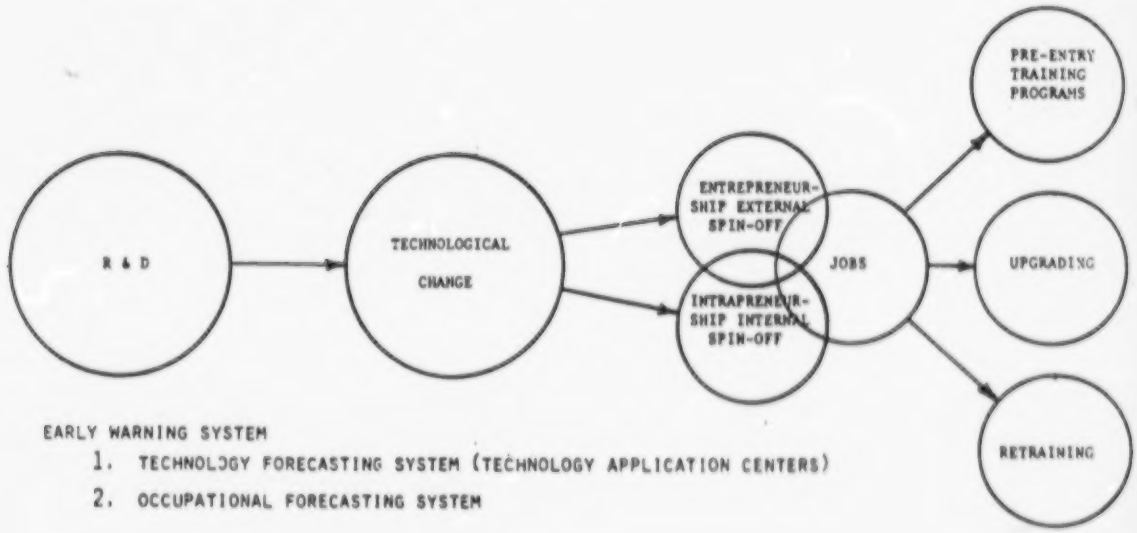
TECHNOLOGICAL CHANGE

- Genetic Engineering
- Telecommunications Equipment
- Electronic Components
- Pharmaceutical, Health Chemicals
- Energy & Power Supplies
- Bio-medical Equipment, Medical Scanners, Pacemakers, Implants
- Computer Equipment (peripherals)
- Computer Software & Supplies
- Security Detection Equipment (fire emergency)
- Home Computers
- CAD/CAM Systems
- Mainframe Computers
- Office Automation Equipment (word processing)
- Semiconductors, Integrated Circuits
- Lasers & Infrared Equipment
- CATV (cable television)
- Microwave Equipment
- Military Systems
- Test Equipment (Quality Assurance)
- Electromechanical Components (robots & numerical control)

INFORMATION TECHNOLOGIES

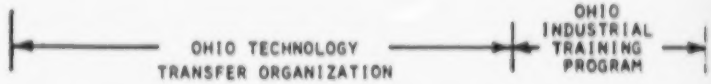
- Computers
- Cable TV
- Videodisk
- Videotex
- Teletext
- Laserdisc
- Optical Fibers
- Computerized PBXs
- Satellites

THE RELATIONSHIP BETWEEN R & D AND ECONOMIC DEVELOPMENT

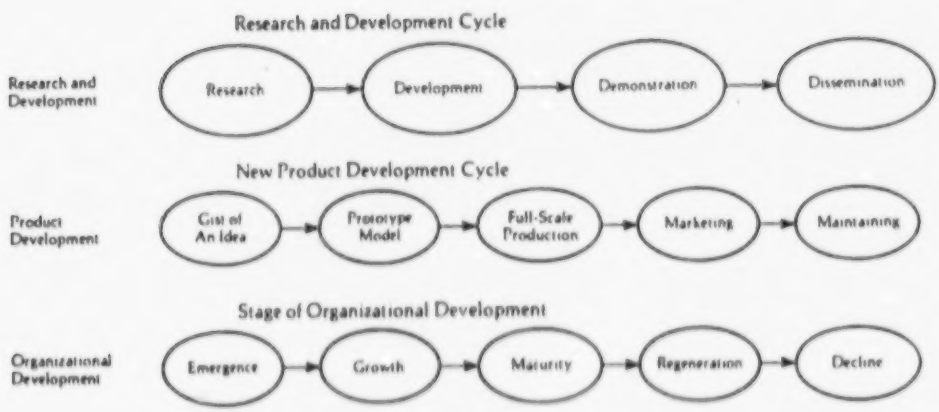


EARLY WARNING SYSTEM

1. TECHNOLOGY FORECASTING SYSTEM (TECHNOLOGY APPLICATION CENTERS)
2. OCCUPATIONAL FORECASTING SYSTEM



Developmental Sequences



Warren H. Groff. "Strategic Planning of Technology Transfer." Journal of Studies in Technical Careers. Summer 1983, Vol. 5, No. 3. Pp. 260-274.

FROM TREND ANALYSIS TO RESTRUCTURING HUMAN RESOURCES DEVELOPMENT SYSTEMS

1992-93 1993-94 1994-95 1995-96

Federal Laboratory Consortium
Private Sector Research & Development
Council on Competitiveness
Depart of Labor SCANS
Work In America
Office of Technology Assessment
Project 2025
NSF Project 2061
American Society for Training & Development
Federal Library & Information Center
Coalition for Networked Information
Satellite Broadcasting
National Technology Information Services
NSFNET
Offices of Ed Res & Improvement
Trend Analysis Program

TREND ANALYSIS COUNCIL

DIRECTORS OF RESEARCH AND DEVELOPMENT

UNITED WAY OF AMERICA

LIBRARY AND INFORMATION SERVICES

ECONOMIC DEVELOPMENT REPRESENTATIVES

AMERICAN SOCIETY FOR TRAINING AND DEVELOPMENT

WORLD FUTURE SOCIETY

DEPARTMENT OF LABOR

CENSUS BUREAU

OFFICE OF TECHNOLOGY ASSESSMENT

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DOE-Argonne National Laboratory
(708) 252-5361

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Technical Center
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DEPUTY COORDINATOR
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REGIONAL COORDINATOR
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DEPUTY COORDINATOR
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Army Harry Diamond Laboratories
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MIDCONTINENT REGION
DEPUTY COORDINATOR NORTH
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DOC-NIST
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DEPUTY COORDINATOR SOUTH
Mr. Douglas Blair
Air Force Armstrong Lagoratory
(512) 536-2838

SOUTHEAST REGION
REGIONAL COORDINATOR
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Tennessee Valley Authority
(615) 632-6435
DEPUTY COORDINATOR
Mr. Eric Greene
HHS-Centers for Disease Control
(404) 639-3812

WASHINGTON, DC REP
Dr. Beverly Berger
1550 M Street, N.W.
11th Floor
Washington, DC 20005
(202) 331-4220

ECONOMIC ESTABLISHMENTS

1. Agricultural services, forestry, fisheries
2. Mining
3. Contract construction
4. Manufacturing
5. Transportation & public utilities
6. Wholesale trade
7. Retail trade
8. Finance, insurance, real estate
9. Services
10. Non-classified

MANUFACTURING (#4) ESTABLISHMENTS

1. Food & Kindred Products
2. Tobacco
3. Textile Mill Products
4. Apparel & Other Textile Products
5. Lumber & Wood Products
6. Furniture & Fixtures
7. Paper & Allied Products
8. Printing & Publishing
9. Chemical & Allied Products
10. Petroleum & Coal Products
11. Rubber & Misc. Plastic Products
12. Leather & Leather Products
13. Stone, Clay & Glass Products
14. Primary Metal Industries
15. Fabricated Metal Products
16. Machinery, Except Electrical
17. Electric & Electronic Equipment
18. Transportation Equipment
19. Instruments & Related Products
20. Miscellaneous Manufacturing Industries
21. Administrative & Auxiliary

SERVICES (#9) ESTABLISHMENTS

1. Hotels & Lodging Places
2. Personnel Services
3. Business Services
4. Auto Repair Services
5. Miscellaneous Repair Services
6. Amusement & Recreational Services
7. Health Services
8. Legal Services
9. Educational Services
10. Social Services
11. Museums, Botanical, Zoological
12. Membership Organizations
13. Miscellaneous Services
14. Administrative & Auxiliary

STANDARD INDUSTRIAL CLASSIFICATIONS (SIC)

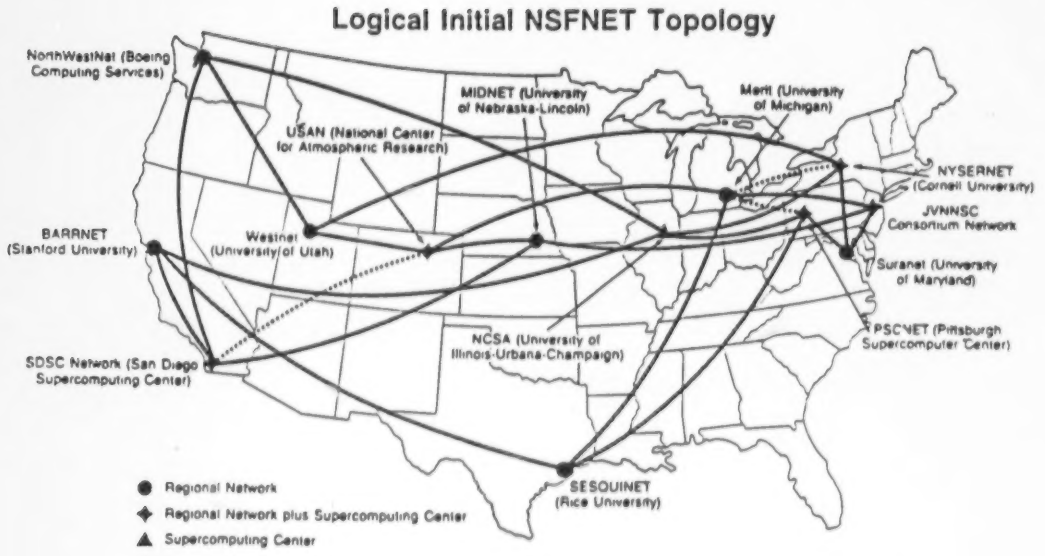
01-0	Agriculture
07	Agricultural services
08-09	Forestry and fishing
10-14	Mining
15-17	Construction
20-39	Manufacturing
40-49	Transportation, communications, & utilities
50-51	Wholesale trade
52-59	Retail trade
60-67	Finance, insurance, and real estate
70-89	Services
91-97	Public administration
99	Nonclassified

MANUFACTURING

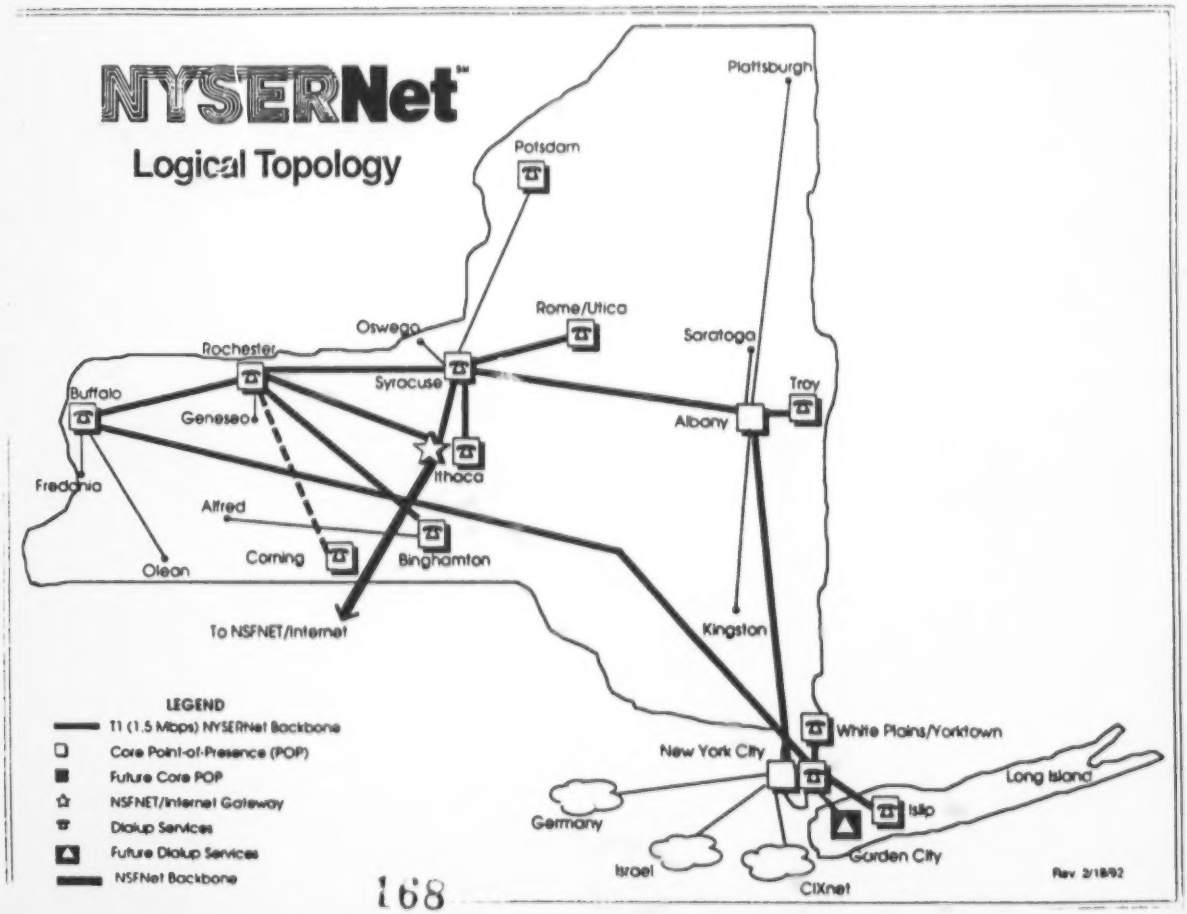
20	Food & Kindred Products
21	Tobacco Manufacturing
22	Textile Mill Products
23	Apparel & Other Textile Products
24	Lumber & Wood Products
25	Furniture & Fixtures
26	Paper & Allied Products
27	Printing & Publishing
28	Chemicals & Allied Products
29	Petroleum & Coal
30	Rubber & Plastic
31	Leather & Leather Products
32	Stone, Clay, Glass, & Concrete Products
33	Primary Metal Industries
34	Fabricated Metal Products
35	Machinery, Except Electrical
36	Electrical & Electronic Equipment
37	Transportation Equipment
38	Instruments & Related Products
39	Miscellaneous Manufacturing Industries

SERVICES

70	Hotels, Rooming Houses, Camps, & Other Lodging Places
72	Personal Services
73	Business Services
75	Automotive Repair, Services, & Garages
76	Miscellaneous Repair Services
78	Motion Pictures
79	Amusement & Recreation Services, Except Motion Pictures
80	Health Services
81	Legal Services
82	Educational Services
821	Elementary & Secondary Schools
822	Colleges, Universities, Professional Schools, & Junior Colleges
83	Social Services (Census Only)
84	Noncommercial Museums, Art Galleries, Botanical & Zoological Gardens (Census Only)
86	Membership Organizations (The Census excludes 863, labor unions & similar organizations, 865, political organizations, & 866 religious organizations; the annual survey excludes SIC 86 entirely.)
89	Miscellaneous Services (Census Only)



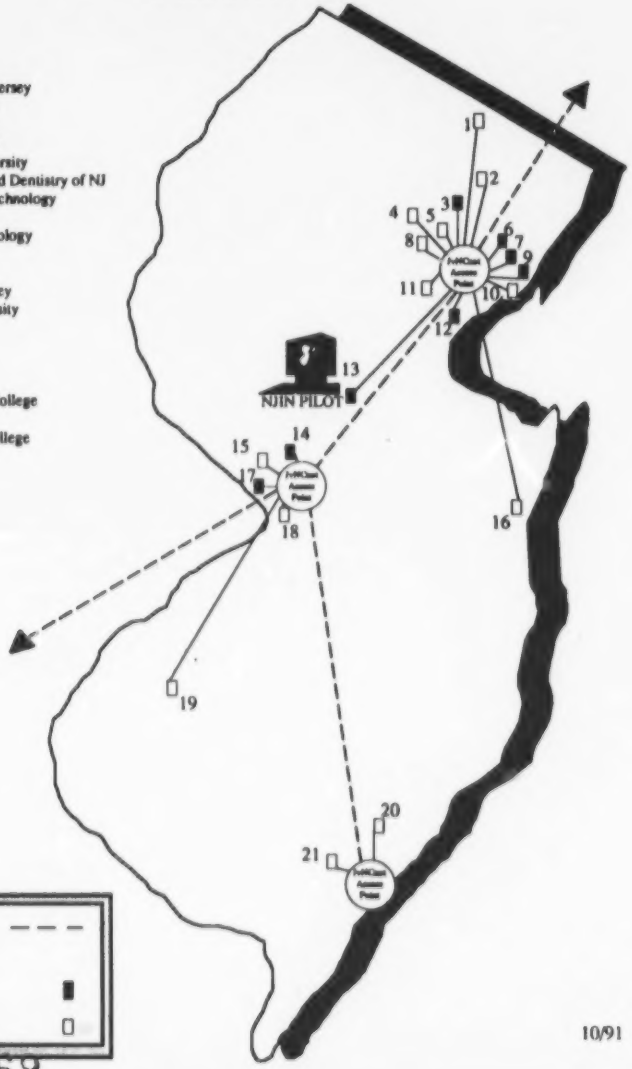
Center for Cartographic Research and Spatial Analysis, Michigan State University, 2/88



New Jersey Intercampus Network (NJIN)
Data Network

NETWORKED SITES

1. Ramapo College of New Jersey
2. William Paterson College
3. Montclair State College
4. College of Saint Elizabeth
5. Fairleigh Dickinson University
6. University of Medicine and Dentistry of NJ
7. New Jersey Institute of Technology
8. Drew University
9. Stevens Institute of Technology
10. Saint Peter's College
11. Seton Hall University
12. Kean College of New Jersey
13. Rutgers, The State University
14. Princeton University
15. Rider College
16. Monmouth College
17. Trenton State College
18. Thomas A. Edison State College
19. Glassboro State College
20. Richard Stockton State College
21. Atlantic County College

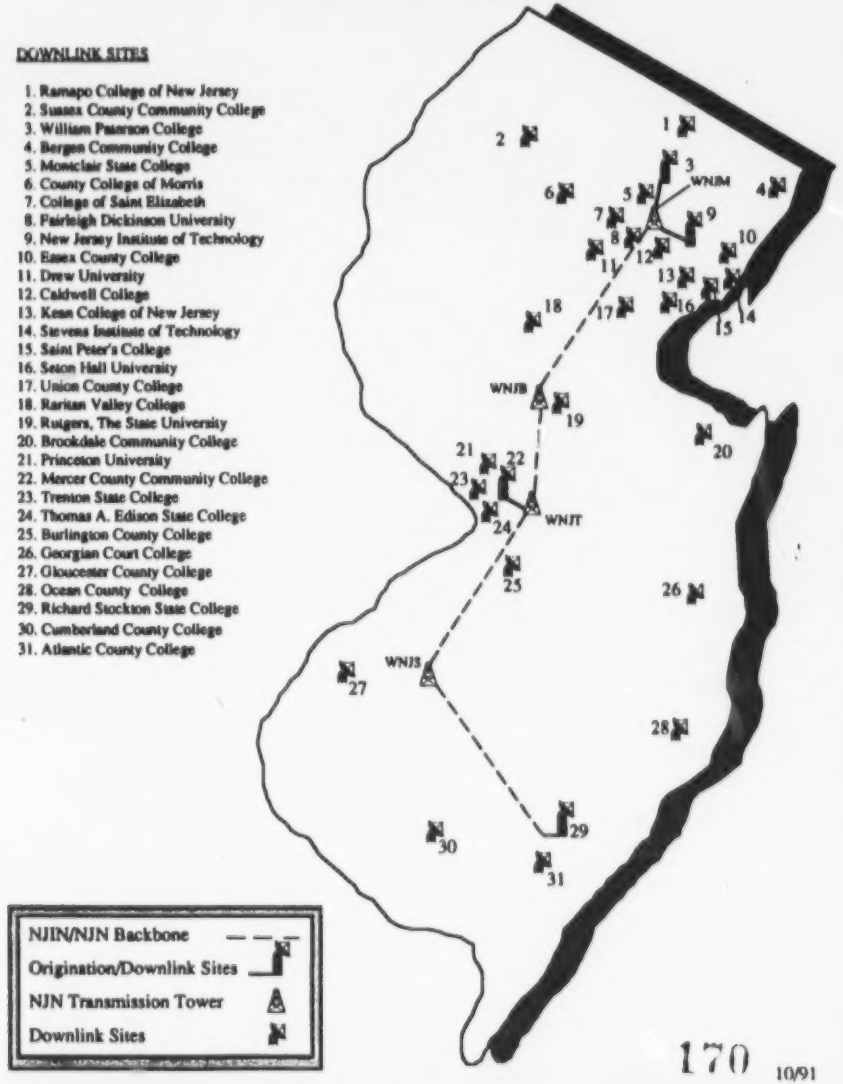


10/91

New Jersey Intercampus Network (NJIN)
Video Network Phase I

DOWNLINK SITES

1. Ramapo College of New Jersey
2. Sussex County Community College
3. William Paterson College
4. Bergen Community College
5. Montclair State College
6. County College of Morris
7. College of Saint Elizabeth
8. Fairleigh Dickinson University
9. New Jersey Institute of Technology
10. Essex County College
11. Drew University
12. Caldwell College
13. Kean College of New Jersey
14. Stevens Institute of Technology
15. Saint Peter's College
16. Seton Hall University
17. Union County College
18. Raritan Valley College
19. Rutgers, The State University
20. Brookdale Community College
21. Princeton University
22. Mercer County Community College
23. Trenton State College
24. Thomas A. Edison State College
25. Burlington County College
26. Georgian Court College
27. Gloucester County College
28. Ocean County College
29. Richard Stockton State College
30. Cumberland County College
31. Atlantic County College



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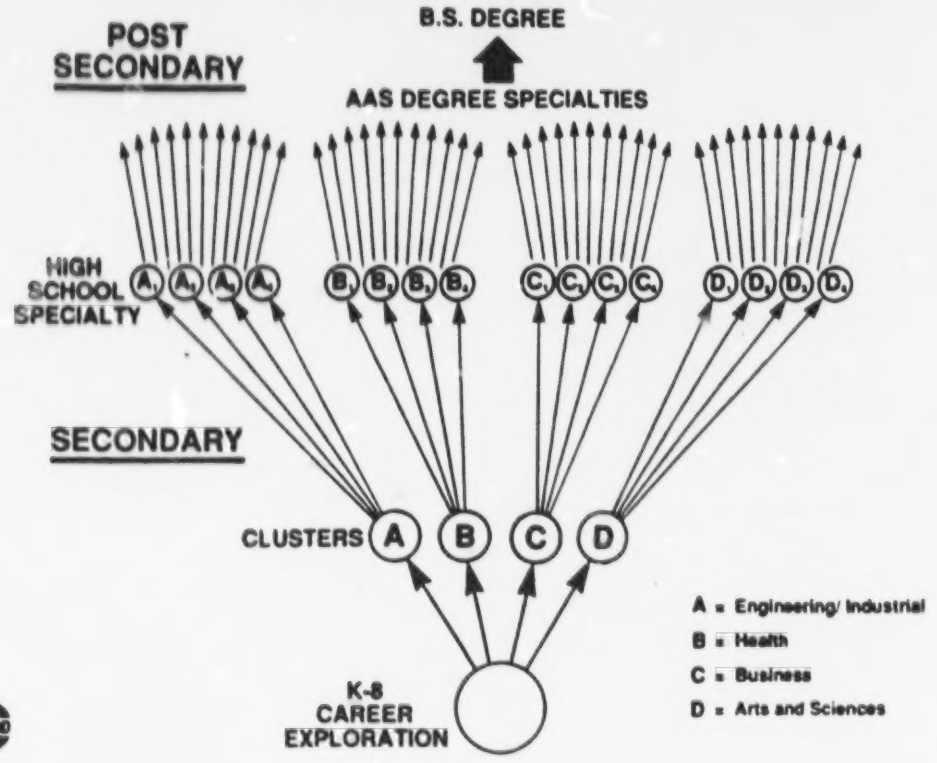
SECONDARY PROGRAM CLUSTERING FOR TPAD



4+2 TPAD MODEL: HEALTH CLUSTER
Nursing

	HIGH SCHOOL				POSTSECONDARY			
SUBJECT	Freshman	Sophomore	Junior	Senior	Freshman A	Freshman B	Sophomore A	Sophomore B
MATH	Applied Math I	Applied Math II	Algebra II					
ENGLISH	English I, II, and III and Applied Communication (4 units)				English I	English II		
SCIENCE	Applied Biology / Chem.	Biology	Principles of Technology I	Chemistry	Anatomy/ Physiology	Anatomy/ Physiology	Microbiology	
HUMANITIES	Geography, History, and Government (4 units)							
OTHER	Health / PE			Psychology	General Psychology	Speech	Human Growth & Development	Principles of Sociology
OTHER								
TECHNICAL CORE	Keyboarding/ Word Proc.	Computer Basics	Intro to Health Careers	Anatomy	Computer	Therapeutic Nutrition	Fundamentals of Physiolog. Chem.	
TECHNICAL CORE								
TECHNICAL SPECIALTY				Health Careers Nursing	Fundamentals of Nursing	Nursing of Adult / Child. I	Nursing of Women	Nursing of Adult / Child. III
TECHNICAL SPECIALTY				Health Careers Nursing	Fundamentals of Nursing	Nursing of Adult / Child II	Mental Health Nursing	Nursing of Adult / Child. IV

BEST COPY AVAILABLE

TECH-PREP

HIGH SCHOOL		*COMMUNITY/TECHNICAL COLLEGE*	
11	12	Freshman	Sophomore
Vocational Programs Applied Academics		Advanced Technology	

ARTICULATION/DUAL CREDIT: 2+1+1

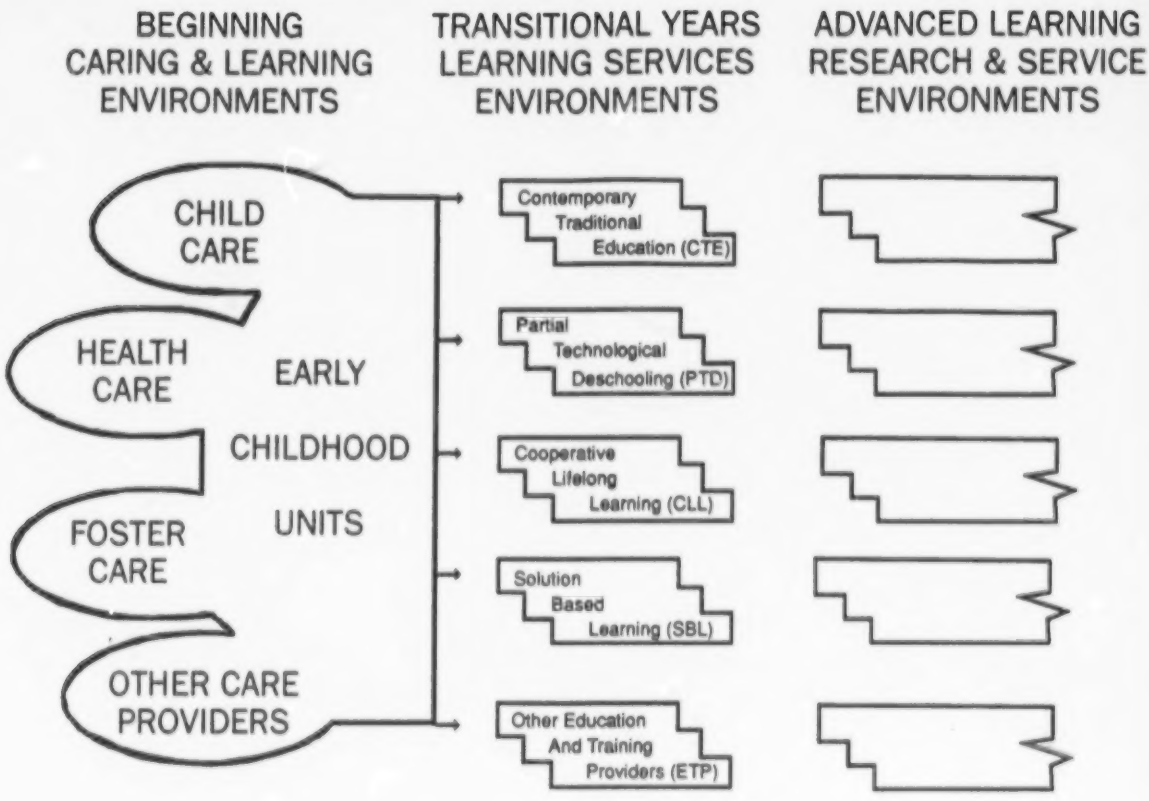
COLLABORATIVE LEARNING

WORK INCENTIVE MODEL FOR TECH-PREP

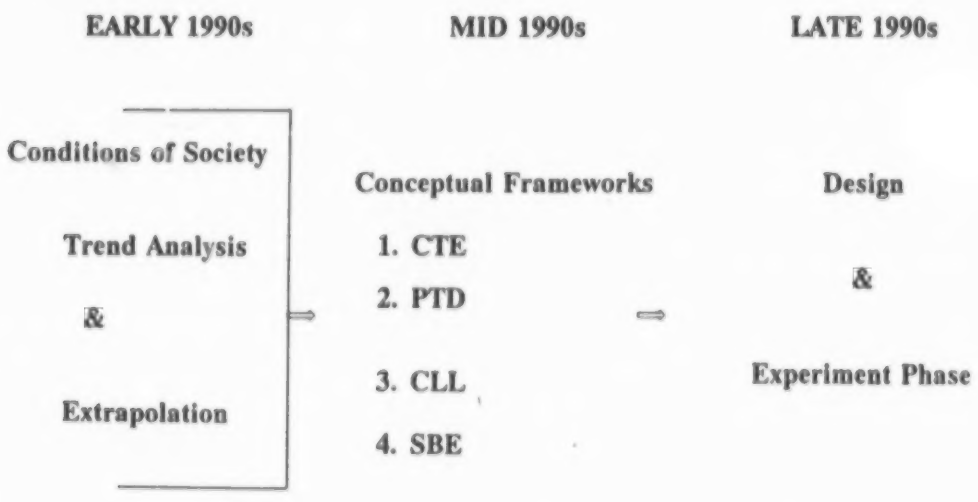
HIGH SCHOOL			*COMMUNITY/TECHNICAL COLLEGE*	
11	12		Freshman	Sophomore
Vocational Programs Applied Academics		**Full-time Summer Employment**	**Advanced Technology**	
10–15 Hours Employment	**BUSINESS/INDUSTRY**			10–20 Hours Employment
OJT/Co-op/Internship/Apprenticeship Real-Time Employment				

James Hoerner

INFO ERA LEARNING COMMUNITIES OF THE FUTURE



TOWARD LEARNING COMMUNITIES OF THE FUTURE



COGNITIVE SYNAPSES & ELECTRONIC NETWORKS:

HUMAN RESOURCES DEVELOPMENT FOR LEARNING COMMUNITIES OF THE FUTURE

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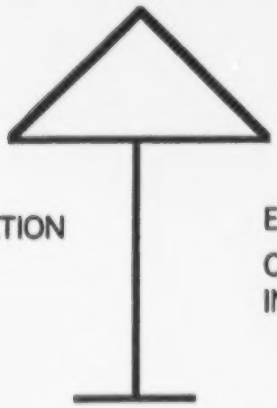

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